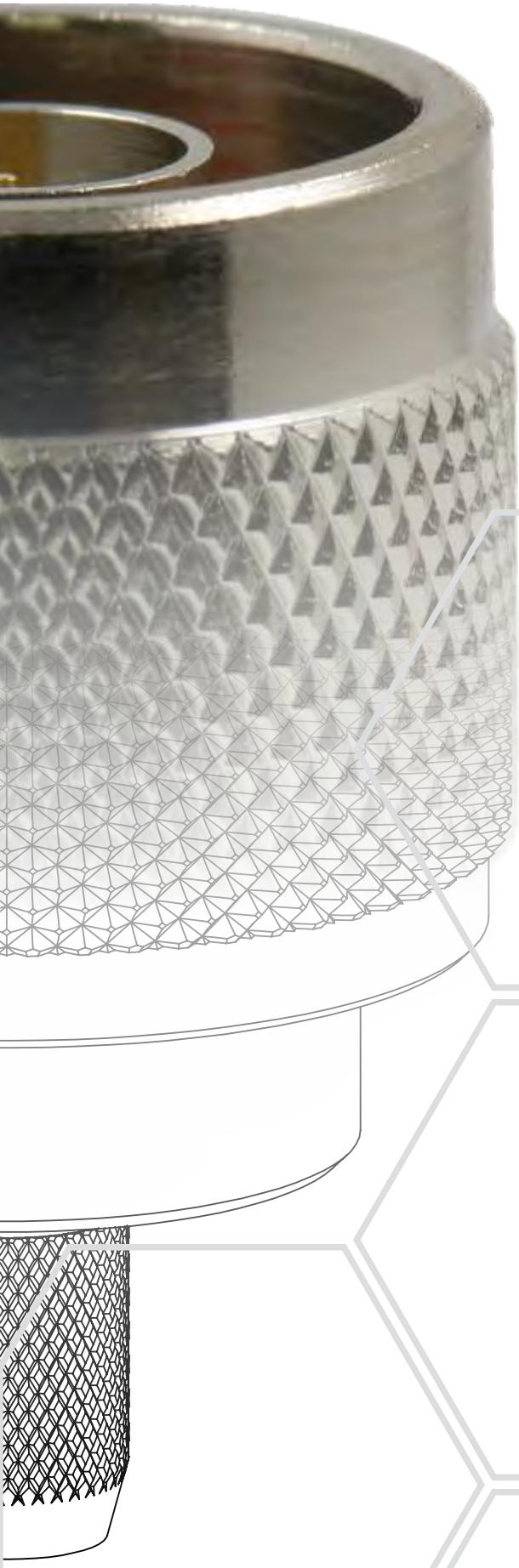
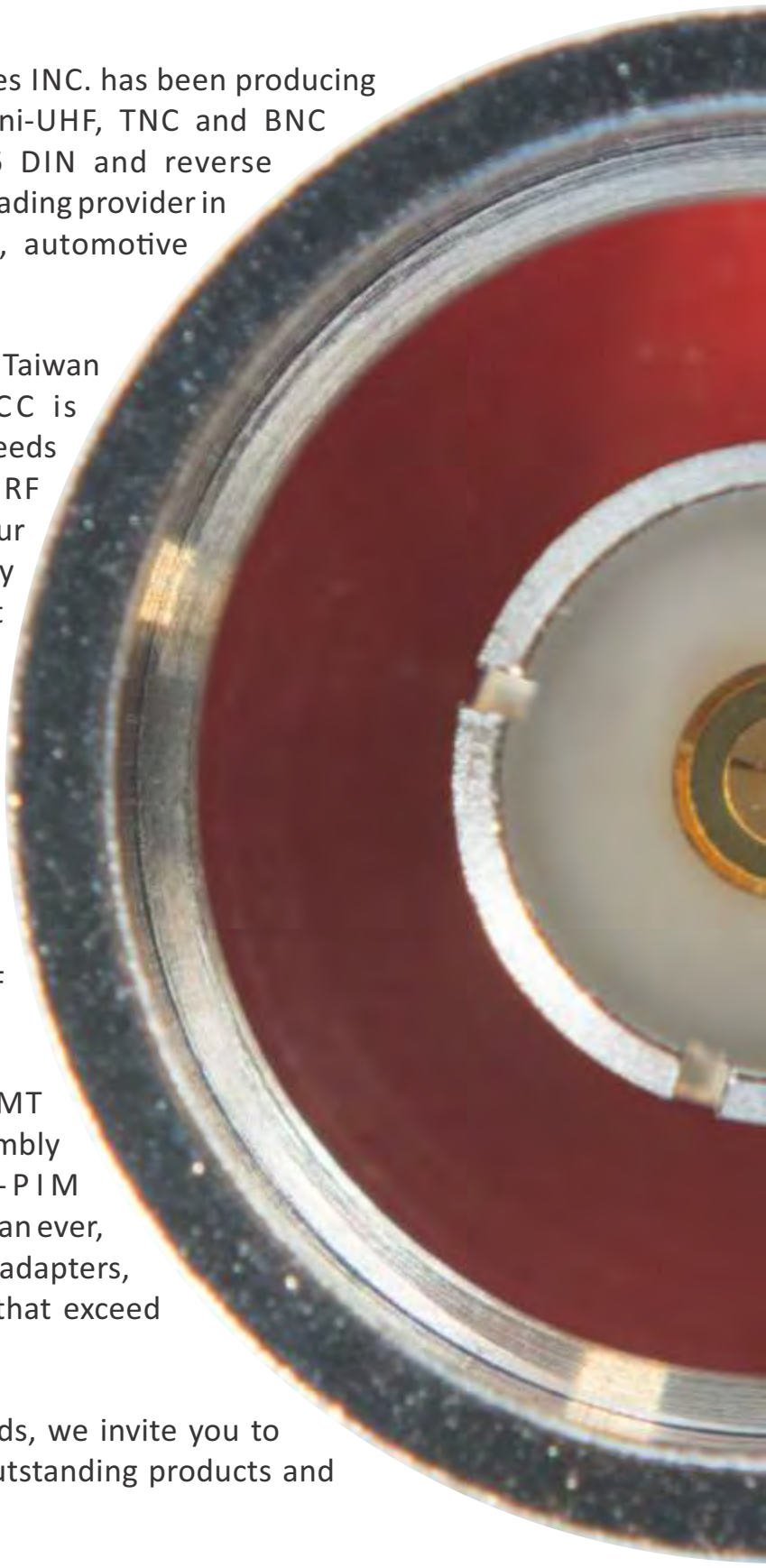


TCC INDUSTRIES INC.

The Connector Company

About TCC

Founded in 1987 in California, TCC Industries INC. has been producing high quality connectors from N, UHF, Mini-UHF, TNC and BNC connectors to SMA, MMCX, SMB, 7/16 DIN and reverse polarity/reverse thread units. TCC is also a leading provider in LOW-PIM, High Performance connectors, automotive FAKRA and HSD connectors.



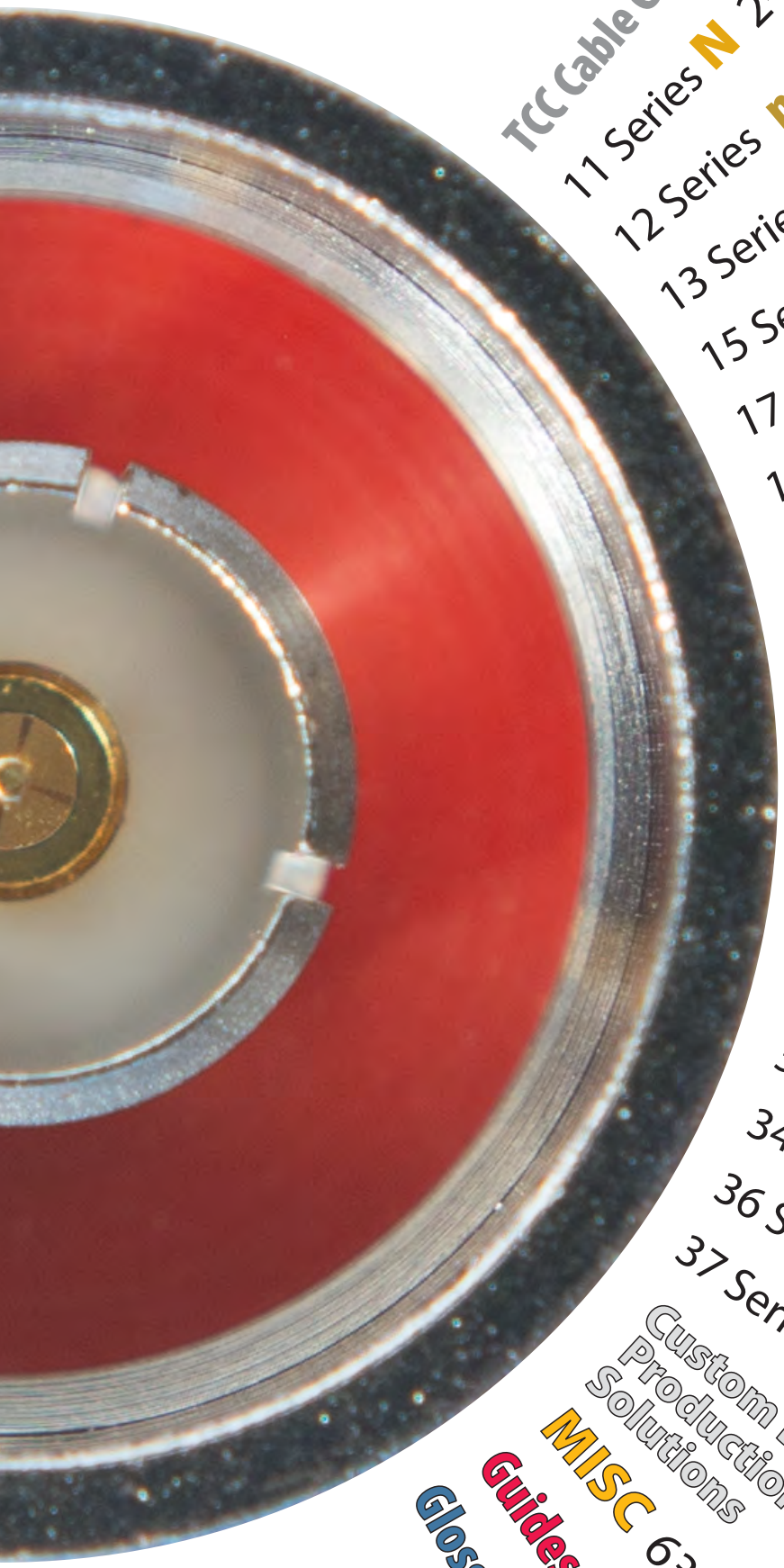
With our ISO/TS16949 approved factories in Taiwan and China including certifications, TCC is positioned to support all of our customers' needs for high volume and high quality, low cost RF Connectors and adapters. TCC supports our OEM customers to the fullest with our ability to create custom RF components. We assist in the design of these components at every step to maximize our clients productivity and ensure compatibility and functionality at the lowest price. Add to that our ability to create other types of components that involve screw machine and die-cast manufactured parts and it's easy to see that TCC can provide the services and support needed to handle today's ever-changing RF applications.

TCC also offers turnkey solutions such as SMT PCB Assembly, fine pitch to BGA. Cable assembly and final product assembly. LOW-PIM performance standards is more important than ever, and TCC is at the forefront for providing adapters, connectors, and cable assembly solutions that exceed our customers needs.

Whatever your product application demands, we invite you to contact TCC and let us demonstrate our outstanding products and commitment to customer service.

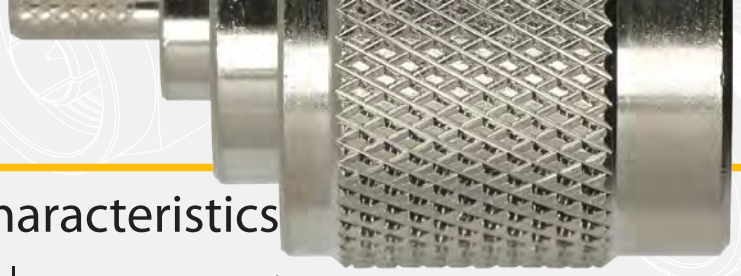
A high quality job requires high quality connections, get the best with TCC.

Contents



TCC Cable Groups

A	6/U, 6A/U; CommScope 5715, 5729, 5765, 2278, 2279; Belden 1694A, 9248, 1695A, 82120, 82248, 87120, 89120, 89248
B	213/U, 8A/U; Belden 8267, 9251, 9880, 89880; Times AA-4478; Alpha 9008, 9213
C	214/U, RG-9, 9A, 9B, 9B/U; Belden 8242, 8268; Alpha 9214
D	11/U; Belden 8213, 8238, 8261, 9011, 9292; CommScope 3247, 5901, 5903, 5908, 5909, 5916, 5916R, 5918
F	58, 58A/U, 58C, 141, 141A/U, 122/U; Times LMR-195®, LMR-200-LLPL®; ; Belden 7806A, 8219, 8240, 8259, 8262, 9201, 9203, 9310, 931, 82240, 82907, 88240, 89907; CNT-195; WBC-195, 0268, TCOM-195; ALPHA 9859, 9158S
G	59, 59A, 59B, 62, 62A, 62C/U, 210/U; Belden 8221, 8241, 9169, 9204, 9228; Alpha 9059, 9062, 9830, 9840, 9845; CommScope 5550, 5555, 5560, 5563
H4	½" Helical, CommScope LDF4-50A
H5	7/8" Helical, CommScope LDF5-50A
K	55, 55A, 55B, 142, 142A, 142B, 142B/U, 223, 400/U; Belden 7806a, 83242, 84142; Alpha 9055, 9055B, 9223
L	174/U, 174, 188, 188A, 316/U; Belden 7805A, 8216, 83269, 83284, 84316; LMR-100A®; Alpha 9174, 9316; Commscope AMC-174, WBC-100
L1	LMR-200®, MSI-22; Alpha 9848; Belden 7807A; CommScope AMC-58II, WBC-200, TCOM-200
L2	LMR-240®; RG-8X; CNT-240; Belden 9258; TCOM-240, TCOM-240-FR, WBC-240, WBC-240R; Harbour HPF240; Micro 8/U; Remee 1600; Saxton 8315
L3	LMR-300®; CNT-300; Belden 7809; TCOM-300, WBC-300; aircell®7
L5	LMR®500; TCOM-500, WBC-500
L6	LMR®600; CNT 600; TCOM-600; WBC-600
M	178, 178/U.178A, 178B, 196, 196A/U; Belden 83265
S1	.085 Semi Rigid; RG-405/U; Belden 1671A; RD-179
S2	.141 Semi Rigid; TFT-402; RG-402/U; Belden 1673A
S3	.250 Semi Rigid; RG-401/U
SJ1	CommScope FSJ1-50A
SJ4	CommScope FSJ4-50A
T	LMR®400; Times AA-5886, AA-6146; CNT-400; Belden 7810A, 8214, 9913; TCOM-400; WBC-400; Cushcraft Ultralink TL93605; Harbour HPF400; aircom®plus; ECOFLEX®10
Z	8X; Belden 7808A



SCAN ME

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-10GHz	
	DWV	1000VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 3milliΩ
		Outer	≤ 2milliΩ
	Insulator	≥ 5000megaΩ	

11-01B-6-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group B

11-01B-6-TGS

N Male Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled, for TCC Cable Group B

11-01H4-H-TSA

N Male Clamp for 1/2" Cable, Teflon Insulation, Hex Shell, Tri-Metal Plated Body, for TCC Cable Group H4

11-01H5-H-TSA

N Male Clamp for 7/8" Cable, Teflon Insulation, Hex Shell, Tri-Metal Plated Body, for TCC Cable Group

11-01C-6-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group C

11-01L6-TGS

N Male Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled, for TCC Cable Group L6

11-01S2-EH-TSA

N Male Clamp, Teflon Insulation, Silver Plated Pin, Tri-Metal Plated Body, Hex Shell, for TCC Cable Group S2

11-01SJ1-EH-TSA

N Male Clamp, Teflon Insulation, Silver Plated Pin, Tri-Metal Body, Hex Shell, for TCC Cable Group SJ1

11-01T-6-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group T

11-01T-6-TGS

N Male Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled, for TCC Cable Group T

11-01X-7-TGN

N Male Clamp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group X

11-02B-3-TGN

N Female Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group B

11-02B-3-TGS

N Female Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, for TCC Cable Group B

11-02F-7-TGN

N Female Clamp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group F

11-02H4-TSA

N Male Clamp, Teflon Insulation Hex Shell, Tri-Metal Plated Body, for TCC Cable Group H4

11-02H5-TSA

N Male Clamp, Teflon Insulation Hex Shell, Tri-Metal Plated Body, for TCC Cable Group H5

11-02L6-TGS

N Female Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, for TCC Cable Group L6

11-02T-3-TGN

N Female Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

11-02T-3-TGS

N Female Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, for TCC Cable Group T

11-05F-6-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

11-03SJ1-EH-HS-TSA

N Male Clamp, Teflon Insulation, Silver Plated Pin, Tri-Metal Body, Hex Shell, with Heat Shrink Tube (20-HST-64), for TCC Cable Group SJ1

11-05F-6-TGS

N Male Clamp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled, for TCC Cable Group F

11-05K-6-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group K

11-05L2-H-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Hex Shell, for TCC Cable Group L2

11-05Z-6-TGN

N Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group Z

11-11B-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group B

11-11B-3-TGS

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group B

11-11B-3-TGA

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Tri-metal Plated Body, Knurled Shell, for TCC Cable Group B

11-11C-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group C

11-11C-3-TGS

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group C

11-11F-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

11-11F-3-TGS

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group F

11-11F-TGA

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Tri-Metal Plated Body, Knurled Shell, for TCC Cable Group F

11-11F-R-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group F

11-11G-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group G

11-11K-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group K

11-11L-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group L

11-11L-RP-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L

11-11L1-RP-TGN

N Male Crimp, Tefon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Polarity, for TCC Cable Group L1

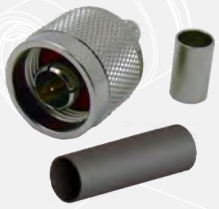
11-11L1-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L1

11-11L2-E-TGN

N Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Solderless, for TCC Cable Group L2

11-11L2-E-HS-TGN



N Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Knurled Shell, Solderless, with Heat shrink tube (20-HST-9.5), for TCC Cable Group L2

11-11L2-EH-TGN

N Male Crimp. Teflon Insulation, Gold Plated Pin, Nickel Plated Body, hexed, Solderless, for TCC Cable Group L2

11-11L2-EH-TGN

N Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Hex Shell, Solderless, with Heat shrink tube (20=HST-9.5), for TCC Cable Group L2

11-11L2-EH-TSA

N Male Crimp Type, Teflon Insulation, Silver Pin, Tri-metal plated,Hex Shell, Solderless, for TCC Group L2

11-11L2-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L2

11-11L3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L3

11-11L6-EHK-TGS

N Male Crimp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled, Solderless, for TCC Cable Group L6

11-11L6-EHK-TGA

N Male Crimp, Teflon Insulation, Gold Plated Pin, Tri-Metal Plated Body, Knurled-Hex Shell, Solderless, for TCC Cable Group L6

11-11L6-EHK-HS-TGA

N Male Crimp, Teflon Insulation, Gold Pin, Tri-Metal Plated Body, Knurled-Hex Shell, Solderless, with Heat Shrink Tube (20-HST-19.6), for TCC Cable Group L6

11-11L6-EHK-HS-TGS

N Male Crimp, Teflon Insulation, Gold Pin, Silver Plated Body, Knurled-Hex Shell, Solderless, with Heat Shrink Tube (20-HST-19.6),for TCC Cable Group L6

11-11L6-TGA

N Male Crimp, Teflon Insulation, Gold Plated Pin, Tri-Metal Body, Knurled, for TCC Cable Group L6.

11-11L6-TGS

N Male Crimp, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled, for TCC Cable Group L6

11-11T-3-TGS

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group T

11-11T-3-TGA

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Tri-Metal Plated Body, Knurled, for TCC Cable Group T

11-11T-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group T

11-11T-4-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Thick Ferrule, for TCC Cable Group T

11-11T-4-TGS

N Male Crimp, Teflon Insulation, Gold Plated Pin, Thick Ferrule, Silver Plated Body for TCC Cable Group T

11-11T-EH-TGN

N Male Crimp Type, Teflon Insulation, Gold Pin, Nickel Plated, HEX Shell, Solderless for TCC Group T

11-11T-EH-TSA

N Male Crimp Type, Teflon Insulation, Silver Pin, Tri-metal Plated, HEX Shell, Solderless for TCC Group T

11-11T-EH-H-TSA

N Male Crimp, Teflon Insulation, Gold Pin, Tri-metal Plated Body, Knurled Shell, Solderless, with Heat Shrink Tube (20-HST-12.7), for TCC Cable Group T

11-11T-EK-TGA

N Male Crimp, Teflon Insulation, Gold Pin, Tri-metal Plated Body, Knurled Shell, Solderless, for TCC Cable Group T

11-11T-H-TGN

N Male Crimp, Teflon Insulation, Gold Captive Pin, Nickel Plated Body, Hex Shell, for TCC Cable Group T

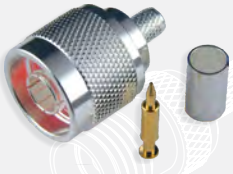
11-11T-RP-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Polarity, for TCC Cable Group T

11-11Z-3-TGN

N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group Z

11-11Z-3-TGS



N Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group Z

11-12F-TGN

N Female Crimp 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

11-13C-H-TGN

N Male Crimp, Teflon Insulation, Nickel Plated Body, Hexed, Right Angle, for TCC Cable Group C

11-13FL1-TGN

N Male Crimp, Teflon Insulation, Nickel Plated Body,Knurled Shell, Right Angle, for TCC Cable Group F

11-13L2-TGN

N male Crimp, Teflon Insulation, Gold Pin, Nickel Plated, Knurled for TCC Cable Group L2

11-13K-TGN

N Male Crimp, Teflon Insulation, Nickel Plated Body, Knurled, Right Angle, For TCC Cable Group K

11-13T-H-TGN

N Male Crimp, Teflon Insulation, Nickel Plated Body, Hexed, Right Angle, for TCC Cable Group T

11-14B-2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group B

11-14B-2-TGS

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group B

11-14C-2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group C

11-14F-2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

11-14F-2-TGS

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group F

11-14F-R-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group F

11-14F-RP-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Polarity, for TCC Cable Group F

11-14K-2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group K

11-14L-RP-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Polarity, for TCC Cable Group L

11-14L-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L

11-14L1-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L1

11-14L1-RP-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Polarity, for TCC Cable Group L1

11-14L2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L2

11-14L3-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L3

11-14L6-TGS

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Silver Plated Body, Knurled, for TCC Cable Group L6

11-14T-2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group T

11-14T-R-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Thread, for TCC Cable Group T

11-14T-RP-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, Reverse Polarity, for TCC Cable Group T

11-14T-4-TGN

N Female, Crimp, Teflon Insualtion, Gold Captive Pin, Nickel Plated Body, Thick Ferrule, for TCC Cable Group T

11-14T-EK-TGN

N Female, Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless for TCC Cable Group T

11-14T-EK-HS-TGN

N Female, Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless with Heat Shrink Tube (20-HST-12.7), for TCC Cable Group T

11-14Z-2-TGN

N Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group Z

11-15F-TGN

N Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

11-15L-TGN

N Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

11-15T-TGN

N Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

11-15Z-TGN

N Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group Z

11-16-3-TGN

N Male 4 Hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering, .69 Flange Extended Post

11-17S2-TGN

N Female Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering, for TCC cable group S2

11-17-38-TGN

N Female Bulkhead, 3/8"Thread, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

11-17-TGN

N Female Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

11-17-TGS

N Female Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Soldering

11-18-2-TGN

N Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

11-18-3-TGN

N Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering, .69 Flange Extended Post.

11-19-R-TGN

N Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, Soldering

11-19-TGN

N Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

11-19-TGS

N Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Soldering

11-20-TGN

Adapter, N Male to N Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

11-20-TGS

Adapter, N Male to N Male, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled

11-21-4-TGN

Adapter, N Female to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

11-21-4-TGS

Adapter, N Female to N Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled

11-23-3-TGN

Adapter Bulkhead Mount, N Female to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-23-TGS

Adapter Bulkhead Mount, N Female to N Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body

11-26-1-TGS

T-Adapter, N Female to N Female to N Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body

11-27-1-TGN

T-Adapter, N Female to N Male to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-28-1-TGN

Adapter, N Male to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

11-28-1-TGS

Adapter, N Male to N Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Right Angle

11-31-TGN

Adapter, N Male to UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-31-TGS

Adapter, N Male to UHF Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled

11-32-TGN

Adapter, N Male to BNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

11-32-TGS

Adapter, N Male to BNC Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled

11-33-TGN

Adapter, N Male to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-33-TGS

Adapter, N Male to TNC Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Knurled

11-35-TGN

Adapter, N Male to F Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

11-38-TGN

Adapter, N Male to TNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

11-39-TGS

Adapter, N Female to UHF Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body

11-40-TGN

Adapter, N Female to BNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-41-TGN

Adapter, N Female to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-43-TGN

N Male Terminator, Teflon Insulation, Gold Plated Pin, Nickel Plated

11-44-TGN

Adapter, N Female to F Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

11-55-TGN

N Female Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

11-PL259-TGS

N Male Twist-on PL-259, Teflon Insulation, Silver Plated Body, Knurled, for TCC Cable Group B

mini-UHF

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-2GHz	
	DWV	1000VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 5milliΩ
		Outer	≤ 3milliΩ
	Insulator	≥ 5000megaΩ	

SCAN ME

12-01F-1-DGN

Mini-UHF Female Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

12-01F-DGN

Mini-UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

12-01L-1-TGN

Mini-UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, Die Cast, for TCC Cable Group F

12-01Z-DGN

Mini-UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group Z

12-02F-DGG

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Attached Pin, Gold Plated Body, Knurled, 3 pieces, for TCC Cable Group F

12-02F-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Attached Pin, Nickel Plated Body, Knurled, 3 pieces, for TCC Cable Group F

12-02F-DGS

Mini-UHF Male, Delrin Insulation, Gold Plated Attached Pin, Silver Plated Body, Knurled, 3 pieces, for TCC Cable Group F

12-02L-3T-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, 4 pieces, for TCC Cable Group L

12-03B-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group B

12-03F-1-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

12-03F-3-TGN

Mini-UHF Push-on type Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

12-03F-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group F

mini-UHF

12-03L-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, Knurled, for TCC Cable Group L

12-03L1-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group L1

12-03L2-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group L2

12-03T-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group T

12-03Z-DGN

Mini-UHF Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled, for TCC Cable Group Z

12-04-DGN

Mini-UHF Female Bulkhead Front Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

12-06-DGN

Adapter, Mini-UHF Female to Mini-UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-08-2-TGN

Adapter, Mini-UHF Male to Mini-UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

12-11-DGN

Adapter, Mini-UHF Male to N Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-12-DGN

Adapter, Mini-UHF Male to UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-13-DGN

Adapter, Mini-UHF Male to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-14-1-TGN

Adapter, Mini-UHF Male Push-on type to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

12-14-DGN

Adapter, Mini-UHF Male to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

12-15-DGN

Adapter, Mini-UHF Female to N Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-16-DGN

Adapter, Mini-UHF Female to UHF Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-17-DGN

Adapter, Mini-UHF Female to BNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

12-18-DGN

Adapter, Mini-UHF Female to TNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Knurled

12-19-TGN

Adapter, Mini-UHF Male to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

mini-UHF

12-22F-DGN

Mini-UHF Male Twist-on, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

12-23-TGN

Mini-UHF Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

12-25-TGN

Adapter, Mini-UHF Push-on type Male to Mini-UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

12-26-TGN

Adapter, Mini-UHF Male to TNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

BNC

Technical Characteristics

Electrical	Impedance	50Ω	75Ω
	Frequency Range	0-4GHz	0-1GHz
	DWV	1000VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 3milliΩ
		Outer	≤ 2milliΩ
	Insulator	≥ 5000megaΩ	

SCAN ME

13-01F-3-DGN

BNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

13-04B-2-DGN

BNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group B

13-04C-2-DGN

BNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group C

13-04L2-2-DGN

BNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L2

13-04T-2-DGN

BNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

13-10A-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group A

13-10C-DGN

BNC Male Crimp Type, Delrin Insulation, Gold Plated Pin, Nickel Plated for TCC Group C

13-10F-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group F

13-10F-RP-TGN

BNC Male Crimp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

13-10F-TGS

BNC Male Crimp, Teflon Insulation, Gold Captive Pin, Silver Plated Body, for TCC Cable Group F

13-10G-DGN

BNC Male, Telon Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group G

13-10K-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group K

BNC

13-10L-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group L

13-10L1-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group L1

13-10L2-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group L2

13-10L2-RP-TGN

BNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L2

13-10T-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group T

13-10T-RP-TGN

BNC Male Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group T

13-10Z-DGN

BNC Male Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group Z

13-11F-DGN

BNC Female Crimp Bulkhead Rear Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

13-11F-RP-DGN

BNC Female Crimp Bulkhead Rear Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

13-11G-DGN

BNC Female Crimp Bulkhead Rear Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group G

13-11L-TGN

BNC Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

13-13L-TGN

BNC Female Crimp, 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Group L

13-15F-DGN

BNC Female Crimp, Delrin Insulation, Gold Plated Captive Pin, Nickel Plated Body, for TCC Cable Group F

13-15F-RP-TGN

BNC Female Crimp, Tefon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

13-15L1-DGN

BNC Female Crimp, Delrin insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable L1

13-15T-RP-TGN

BNC Female Crimp, Teflon Insulation, Gold Plated Captive Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group T

13-17F-DGN

BNC Male Twist-on, Delrin Insulation, Gold Plated Formed Pin, Nickel Plated Body, for TCC Cable Group F

13-17G-DGN

BNC Male Twist-on, Delrin Insulation, Gold Plated Formed Pin, Nickel Plated Body, for TCC Cable Group G

BNC

13-18F-DGN

BNC Female Twist-on, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

13-18G-DGN

BNC Female Twist-on, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group G

13-19F-TGN

BNC Male Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Taper grip, for TCC Cable Group F

13-21-TGN

BNC Male 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

13-22-1-TGN

BNC Female PCB Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

13-22-TGN

BNC Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

13-24-DGN

BNC Male Bulkhead Rear Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

13-25-TGN

BNC Female Bulkhead Rear Mount, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

13-28-AGN

BNC Female Bulkhead Rear Mount, ABS Insulation, Gold Plated Pin, Nickel Plated Body, Insulated

13-29-1-DGN

Adapter, BNC Female to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-30-DGNZ

Adapter, BNC Male to BNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Die Cast

13-32-3-DGN

Adapter, BNC Female to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-33-DGN

Adapter, BNC Male to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

13-37-2-DGN

T-Adapter, BNC Female to BNC Female to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-39-2-DGN

T-Adapter, BNC Female to BNC Male to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-43-DGN

Adapter, BNC Male to N Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-44-DGN

Adapter, BNC Male to UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-45-DGN

Adapter, BNC Male to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-60-32-DGNZ

BNC Female PCB Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, Insulated

13-46-DNN

Adapter, BNC Male to RCA Female, Delrin Insulation, Nickel Plated Body, Nickel Plated Pin

BNC Female Mx

13-47-DGN

Adapter, BNC Male to F Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-49-DGN

Adapter, BNC Female to UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

13-69-DGN

Antenna Adapter, Telon Insulation, Gold Plated Pin, Nickel Plated Body

13-9756A-TGN

BNC Female Phone Plug Adapter for Motorola, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

13-EP450-TGN

BNC Antenna Adapter for Motorola, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

TNC

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-4GHz	
	DWV	500VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 3milliΩ
		Outer	≤ 2milliΩ
	Insulator	≥ 5000megaΩ	

SCAN ME

15-02F-4-DGN

TNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group F

15-03F-DGN

TNC Male Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-03L-RP-TGN

TNC Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L

15-07F-DGN

TNC Female Clamp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-10B-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group B

15-10F-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-10F-DGS

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Silver Plated Body, for TCC Cable Group F

15-10F-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-10F-R-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group F

15-10F-RP-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

15-10G-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group G

15-10K-DGN

TNC Male Crimp, Telon Insulation, Gold Plated Pin. Nickel Plated Body, for TCC Cable Group K

TNC

15-10L-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

15-10L1-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L1

15-10L1-RP-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L1

15-10L2-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L2

15-10L2-RP-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L2

15-10L3-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L3

15-10L6-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L6

15-10T-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

15-10T-RP-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group T

15-10Z-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group Z

15-11F-DGN

TNC Female Crimp Bulkhead Rear Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-11F-RP-TGN

TNC Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

15-11G-DGN

TNC Female Crimp Bulkhead Rear Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group G

15-11L-RP-TGN

TNC Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L

15-11L-TGN

TNC Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

15-11T-RP-TGN

TNC Female Crimp Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group T

15-12L-TGN

TNC Female Crimp Bulkhead Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable group L

15-15F-DGN

TNC Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-15F-RP-TGN

TNC Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

15-15G-DGN

TNC Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

15-15L-DGN

TNC Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

15-15L2-RP-TGN

TNC Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Platted, Reverse Polarity for TCC Group L2

15-15L2-TGN

TNC Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L2

15-15L6-RP-TGN

TNC Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L6

15-15T-TGN

TNC Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

15-15T-RP-TGN

TNC Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group T

15-16FL1-4-DGN

TNC Male Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group F

15-16K-4-DGN

TNC Male Crimp, Delrin Insulation, Gold Pin, Nickel Plated Body, Right Angle, for TCC Cable Group K

15-16T-TGN

TNC Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group T

15-19F-DGN

TNC Male Twist-on, Telon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

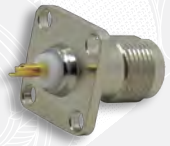
15-28-DGN

TNC Female Bulkhead Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, Soldering

15-29-1-TGN

TNC Female Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

15-30-TGN



TNC Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

15-30-RP-TGN

TNC Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, Soldering

15-31-TGN

Adapter, TNC Male to TNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

15-33-DGN

Adapter, TNC Female to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

TNC

15-34-DGN

Adapter Bulkhead Mount, TNC Female to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

15-35-DGN

Adapter, TNC Male to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

15-38-DGN

T-Adapter, TNC Female to TNC Male to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

15-44-DGN

Adapter, TNC Male to N Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

15-44-RP-TGN

Adapter, TNC Male Reverse Polarity to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

15-45-DGN

Adapter, TNC Male to UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

15-46-DGN

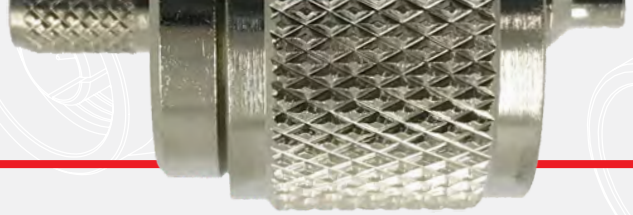
Adapter, TNC Male to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

15-49-DGN

Adapter, TNC Male to TNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

15-60-32-DGNZ

TNC Female PCB Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, Die Cast



SCAN ME

Technical Characteristics

Electrical	Impedance	non-constant
	Frequency Range	0-300MHz
VSWR		non-constant

17-01F-5-TGN

UHF Male Clamp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

17-03B-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, for TCC Cable Group B

17-03C-7-DSS

UHF Male Crimp, Delrin Insulation, Silver Plated Pin, Silver Plated Body, for TCC Cable Group C

17-03D-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, for TCC Cable Group D

17-03F-11-DNNZ

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, Die Cast, Center ID 1.1, for TCC Cable Group F

17-03F-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Body, for TCC Cable Group F

17-03F-7-DSS

UHF Male Crimp, Delrin Insulation, Silver Plated Pin, Silver Plated Body, for TCC Cable Group F

17-03F-7-TSS

UHF Male Crimp, Telon Insulation, Silver Captive Pin, Silver Plated Body, for TCC Cable Group F

17-03G-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Silver Plated Body, for TCC Cable Group G

17-03L1-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, for TCC Cable Group L1

17-03L2-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, for TCC Cable Group L2

17-03T-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, for TCC Cable Group T

UHF

17-03Z-7-DNN

UHF Male Crimp, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body, for TCC Cable Group Z

17-03Z-7-DSS

UHF Male Crimp, Delrin Insulation, Silver Plated Pin, Silver Plated Body, for TCC Cable Group Z

17-06B-1-TSSN

UHF Male, Telon Insulation, Silver Plated Pin, Silver Plated Body, Nickel Shell, for TCC Cable Group B

17-06B-1-TSSS

UHF Male, Telon Insulation, Silver Plated Pin, Silver Plated Body, Silver Shell, for TCC Cable Group B

17-06B-BSSN

UHF Male, Bakelite Insulation, Silver Plated Pin, Silver Plated Body, Nickel Shell for TCC Cable Group B

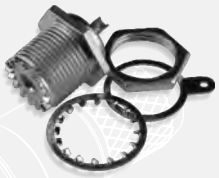
17-07-3-DSN

UHF Female Bulkhead Mount, Delrin Insulation, Silver Plated Pin, Nickel Plated Body, Soldering

17-07-1-DSN

UHF Female Bulkhead Mount, Delrin Insulation, Silver Plated Pin, Nickel Plated Body, Long Barrel

17-07-31-TSN



UHF Female Bulkhead Mount, Teflon Insulation, Silver Pin, Nickel Plated Body.

17-07-DSN

UHF Female Bulkhead Mount, Delrin Insulation, Silver Plated Pin, Nickel Plated Body, Soldering

17-07-TGS

UHF Female Bulkhead Mount, Telon Insulation, Silver Plated Pin, Nickel Plated Body, Soldering

17-08-TGNZ

UHF Female 4 hole Panel Mount, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Die Cast, Soldering

17-08-TSSZ

UHF Female 4 hole Panel Mount, Telon Insulation, Silver Plated Pin, Silver Plated Body, Die Cast, Soldering

17-08-DNNZ

UHF Female 4 hole Panel Mount, Delrin Insulation, Nickel Plated Body, Nickel Plated Pin, Die Cast, Soldering

17-09F-1-N

Reducer, Nickel Plated Body, for TCC Cable Group F

17-09F-1-S

Reducer, Silver Plated Body, for TCC Cable Group F

17-09G-1-N

Reducer, Nickel Plated Body, for TCC Cable Group G

17-09G-1-S

Reducer, Silver Plated Body, for TCC Cable Group G

17-09L-1-S

Reducer, Silver Plated Body, for TCC Cable Group L

UHF

17-10-DNN

Adapter, UHF Male to UHF Male, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body

17-11-7-DNN

Adapter, UHF Female to UHF Female, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body.

17-11-DNN

Adapter, UHF Female to UHF Female, Delrin Insulation, Nickel Plated Pin, Nickel Plated Body

17-11-TGNZ

Adapter, UHF Female to UHF Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Nickel Plated Pin

17-11-TGS

Adapter, 16 cuts, UHF Female to UHF Female , Teflon Insulation, Gold Pin, Nickel Plated Body, Nickel Pin

17-12-1-DNN

Adapter, 16 cuts, UHF Adapter Bulkhead Mount , UHF Female to UHF Female , Delrin Insulation, Nickel Plated Body

17-12-M-DNN

Adapter Bulkhead Mount, UHF Female to UHF Female, Delrin Insulation, Nickel Plated Body

17-12-TGN

Adapter Bulkhead Mount, UHF Female to UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

17-12-TSS

Adapter Bulkhead Mount, UHF Female to UHF Female, Teflon Insulation, Silver Plated Pin, Silver Plated Body

17-13-DNN

T-Adapter, UHF Female to UHF Male to UHF Female, Delrin Insulation, Nickel Plated Body, Nickel Plated Pin

17-14-DSN

T-Adapter, UHF Female to UHF Female to UHF Female, Delrin Insulation, Silver Plated Pin, Nickel Plated Body

17-15-DGN

Adapter, UHF Male to UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

17-15-TGN

Adapter. UHF Male to UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

17-15-TGS

Adapter, UHF Male to UHF Female, Teflon Insulation, Gold Plated Pin, Silver Plated Body, Right Angle

17-18-DGN

Adapter, UHF Male to N Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

17-18-TGS

Adapter, UHF Male to N Female, Telon Insulation, Gold Plated Pin, Silver Plated Body

17-19-DGN

Adapter, UHF Male to BNC Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

17-19-DNN

Adapter, UHF Male to BNC Female, Delrin Insulation, Nickel Plated Body, Nickel Plated Pin

UHF

17-20-DNN

Adapter, UHF Male to TNC Female, Delrin Insulation, Nickel Plated Body, Nickel Plated Pin

17-21-DGN

Adapter, UHF Male to RCA Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body.

17-26B-TGN

UHF Female Clamp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group B

17-26F-TGN

UHF Female Clamp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

17-27F-DNN

UHF Male , Delrin Insulation, Nickel Plated Body, Nickel Pin, Speed, for TCC Cable Group F

17-28-DGN

Adapter, UHF Male to Mini-UHF Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

17-32F-DGN

UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

17-32L-DGN

UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

17-32T-DGN

UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

17-32Z-DGN

UHF Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group Z

17-33-TGS

UHF Male, Telon Insulation, Gold Plated Pin, Silver Plated Body, Soldering

17-35T-TGN

UHF Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Body Plated, Right Angle for TCC Cable Group T

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-18GHz	
	DWV	1000VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 5milliΩ
		Outer	≤ 1milliΩ
	Insulator	≥ 5000megaΩ	

19-01F-TGN

SMA Male Clamp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

19-01L-TGG

SMA Male Clamp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

19-02F-E-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, Solderless for TCC Group F

19-02FL1-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group F and L1

19-02F-E-HS-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, Solderless with Heat Shrink Tube (20-HST-9.5) for TCC Group F

19-02K-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group K

19-02L-6-TGN

SMA Male Crimp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group L

19-02L-RP-TGG

SMA Male Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, Right Angle, Reverse Polarity, for TCC Cable Group L

19-02L2-E-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, Solderless for TCC Group L2

19-02L2-E-HS-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, Solderless with Heat Shrink Tube (20-HST-9.5)for TCC Group L2

19-03C-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group C

19-03F-E-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless, for TCC Cable Group F

19-03F-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group F

19-03F-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

19-03F-R-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group F

19-03F-RP-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

19-03F-RP-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity for TCC Cable Group F

19-03K-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group K

19-03L-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

19-03L-9-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

19-03L-RP-TGG

SMA Male Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, Reverse Polarity, for TCC Cable Group L

19-03L-RP-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L

19-03L1-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L1

19-03L1-E-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless,..for TCC Cable Group L1

19-03L1-E-HS-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless with Heat Shrink Tube (20-HST-9.5) for TCC Cable Group L1

19-03L1-R-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group L1

19-03L1-RP-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L1

19-03L1-RP-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, Reverse Polarity, for TCC Cable Group L1

19-03L2-9-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L2

19-03L2-R-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group L2

19-03L2-E-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless, for TCC Cable Group L2

19-03L2-E-HS-TGN

SMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Solderless with Heat Shrink Tube (20-HST-9.5), for TCC Cable Group L2

19-03L2-RP-TGG

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, Reverse Polarity, for TCC Cable Group L2

19-03L2-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L2

19-03L3-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body for TCC Cable Group L3

19-03S1-TGG

SMA Male Semi-Rigid, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group S1

19-03S1-TGN

SMA Male Semi-Rigid, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group S1

19-03S2-TGN

SMA Male Semi-Rigid, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group S2

19-03T-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

19-03T-RP-TGN

SMA Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group T

19-04L-TGN

SMA Female Bulkhead Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

19-05F-1-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

19-05F-9-RP-TGG

SMA Female Bulkhead Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, Reverse Polarity, for TCC Cable Group F

19-05F-9-TGG

SMA Female Bulkhead Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group F

19-05F-RP-TGG

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, Reverse Polarity, for TCC Cable Group F

19-05F-RP-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group F

19-05K-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group K

19-05L-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

19-05L1-RP-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group L1

19-05L1-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L1

19-05L2-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L2

19-05S1-R-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, for TCC Cable Group S1

19-05S1-RP-TGN

SMA Female Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, for TCC Cable Group S1

19-05T-TGN

SMA Female Crimp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

19-13-2-TGN

SMA Female 4 Hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-13-EX-TGN

SMA Female 4 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering. Extender Post

19-13-RP-TGN

SMA Female 4 holes Panel Mount, Teflon, Insulation, Gold Plated Pin, Nickel Plated Body, Soldering, Reverse Polarity

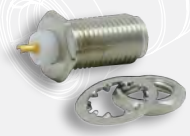
19-13-TGN

SMA Female 4 hole Panel Mount, Telon Insulation, Gold Plated Pin, Nickel Plated Body

19-16-1-TGN

SMA Female Bulkhead Rear Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

19-16-R-TGN



SMA Female Bulkhead Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Thread, Soldering

19-16-TGN

SMA Female Bulkhead Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

19-17-85-TGN

SMA Female 2 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Crimp

19-17-EX-TGN

SMA Female 2 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering. Extender Post

19-17-TGN

SMA Female 2 hole Panel Mount, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

19-19-TGN

T-Adapter, SMA Female to SMA Male to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-20-TGN

Adapter, SMA Male to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

19-22-1-TGN

Adapter, SMA Male to SMA Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-23-TGN

Adapter, SMA Female to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-24-1-TGN

Adapter, SMA Male to N Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-25-1-TGN

Adapter, SMA Male to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-25-RP-TGN

Adapter, SMA Male Reverse Polarity to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body,

19-26-TGN

Adapter, SMA Male to UHF Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-27-TGN

Adapter, SMA Male to UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-28-TGN

Adapter, SMA Male to BNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-29-TGG

Adapter, SMA Male to BNC Female, Teflon Insulation, Gold Plated Pin, Gold Plated Body

19-29-TGN

Adapter, SMA Male to BNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-30-TGN

Adapter, SMA Male to TNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-31-1-TGN

Adapter, SMA Male to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-32-TGN

Adapter, SMA Male to Mini-UHF Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-33-TGN

Adapter, SMA Male to Mini-UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-34-1-TGN

Adapter, SMA Female to N Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-35-1-TGN

Adapter, SMA Female to N Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-36-TGN

Adapter, SMA Female to UHF Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-37-TGN

Adapter, SMA Female to UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

SMA

19-38-TGN

Adapter, SMA Female to BNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-39-TGN

Adapter, SMA Female to BNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-40-TGN

Adapter, SMA Female to TNC Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-41-3-TGN

Adapter, SMA Female to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-42-TGN

Adapter, SMA Female to Mini-UHF Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-43-1-TGN

Adapter, SMA Female to Mini-UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

19-48-TGG

SMA Female PCB Mount, Teflon Insulation, Gold Body

SCAN ME

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	Straight	0 - 6GHz
		Right Angle	0 - 3GHz
	DWV	1000VRMS max.	
VSWR	Straight	1.15 max.	
	Right Angle	1.05:1 max.	
Resistance	Contact	Center	≤ 10milliΩ
		Outer	≤ 5milliΩ
	Insulator	≥ 5000megaΩ	

22-02F-E-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, SOLDERLESS for TCC Group F

22-02F-E-HS-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, with HeatShrink SOLDERLESS for TCC Group F

22-02K-E-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, SOLDERLESS for TCC Group K

22-02K-E-HS-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, with HeatShrink SOLDERLESS for TCC Group K

22-02L2-E-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, SOLDERLESS for TCC Group L2

22-02L2-E-HS-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, with HeatShrink SOLDERLESS for TCC Group L2

22-03L2-E-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, SOLDERLESS for TCC Group L2

22-03L2-E-HS-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, with HeatShrink SOLDERLESS for TCC Group L2

22-03F-E-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, SOLDERLESS for TCC Group F

22-03F-E-HS-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, with HeatShrink SOLDERLESS for TCC Group F

22-03K-E-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, with HeatShrink SOLDERLESS for TCC Group K

22-03K-E-HS-TGN

QMA Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, with HeatShrink SOLDERLESS for TCC Group K

FME

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-3GHz	
	DWV	1000VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 10milliΩ
		Outer	≤ 5milliΩ
	Insulator	≥ 5000megaΩ	

SCAN ME

23-02FW-DGN

FME Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

23-02L-DGN

FME Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

23-02L2-DGN

FME Female Crimp, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L2

23-02T-DGN

FME Female Crimp,Delrin Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group T

23-03-DGN

Adapter, FME Male to FME Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

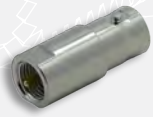
23-04-3-TGN

Adapter, FME Male to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

23-05-DGN

Adapter, FME Male to Mini-UHF Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-06-TGN



Adapter, FME Male to BNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

23-07F-2-TGN

FME Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

23-07L-2-TGN

FME Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

23-09-DGN

Adapter, FME Male to N Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-10-DGN

Adapter, FME Male to Mini-UHF Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-11-DGN

Adapter, FME Male to BNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-12-DGN

Adapter, FME Male to TNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-13-DGN

Adapter, FME Male to UHF Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-14-TGN

Adapter, FME Male to SMA Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

23-15-DGN

Adapter, FME Female to FME Female, Delrin Insulation, Gold Plated Pin, Nickel Plated Body

23-16-TGN

Adaptor, FME Female to SMA Female. Teflon insulation, Gold pin, Nickle plated Body

23-17-TGN

Adapter, FME Female to N Male, Delrin Insulation, Gold Pin, Nickel Plated Body

23-19-TGN

Adapter, FME Female to Mini-UHF Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

23-21-1-TGN

Adapter, FME Female to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body

23-23-TGN

Adapter, FME Female to N Female Adapter, Teflon Insulation, Gold pin, Nickel plated

23-24-TGN

FME Male Bulkhead Mount, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

23-25-TGN

Adapter, FME Male to Mini-UHF Male, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

23-26-DGN

Adapter, FME Male to BNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

23-27-DGN

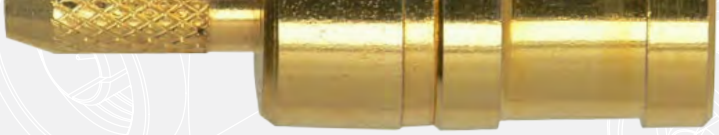
Adapter, FME Male to TNC Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

23-28-TGN

Adapter, FME Male to SMA Male, Delrin Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle

23-29-TGN

Adapter, FME Male to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body. Right Angle



SMB

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-4GHz	
	DWV	1000VRMS min.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 6milliΩ
		Outer	≤ 2.5milliΩ
	Insulator	≥ 1000megaΩ	

SCAN ME

24-05F-TGG

SMB Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

24-05F-TGN

SMB Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, for TCC Cable Group F

24-05L-TGG

SMB Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

24-05L-TGN

SMB Male Crimp, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

24-05M-TGG

SMB Male Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group M

24-06L-TGG

SMB Female Crimp, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

24-07L-TGG

SMB Female Crimp Bulkhead Mount, Teflon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

24-08FL1-TGN

SMB Male Crimp, Teflon Insulation, Gold Pin, Nickel Plated Body, Right Angle, for TCC Cable Group F & L1

24-08L-TGG

SMB Male Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, Right Angle, for TCC Cable Group L

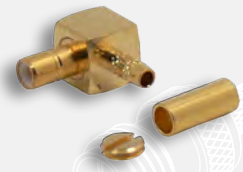
24-08L-TGN

SMB Male Crimp, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Right Angle, for TCC Cable Group L

24-09-TGN

SMB Female Bulkhead Mount, Telon Insulation, Gold Plated Pin, Nickel Plated Body, Soldering

24-18L-TGG



SMB Female Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, Right Angle, for TCC Cable Group L

Universal Adapter Kits

40pc deluxe kit

25-AK-40-TGN

This kit provides maximum lexability to accomodate many diferent applications. Great for use in the ield or on the bench, with our deluxe kit you'll always be able to make the connections that you need. This 40 piece kit contains:

- 6 universal centers
- 2 N males
- 2 N females
- 2 TNC males
- 2 TNC females
- 2 SMA males
- 2 SMA females
- 2 Reverse Polarity SMA males
- 2 Reverse Polarity SMA females
- 2 Reverse Polarity TNC males
- 2 Reverse Polarity TNC females
- 1 BNC males
- 1 BNC females
- 1 MMCX males
- 1 MMCX females

25-AK-30-TGN

30pc general purpose kit

A time saver for those unique instances where you are required to make connections with several diferent connector types. These adapters are made from the same high quality materials that all of TCC's connectors are made from in order to ensure the best performance and low insertion loss. Packaged in a soft zippered case, this 30 piece kit contains:

- 6 universal centers
- 2 UHF males
- 2 UHF females
- 2 Mini-UHF males
- 2 Mini-UHF females
- 2 N males
- 2 N females
- 2 BNC males
- 2 BNC females
- 2 TNC males
- 2 TNC females
- 2 SMA males
- 2 SMA females

30pc wifi kit

25-AK-30-TGN-WIFI

All of the convenience, lexibility, and quality of our general adapter kit but with components geared for wii speciic applications.
This 30 piece kit contains:

- 6 universal centers
- 2 N males
- 2 N females
- 2 TNC males
- 2 TNC females
- 2 SMA males
- 2 SMA females
- 2 Reverse Polarity SMA males
- 2 Reverse Polarity SMA females
- 2 Reverse Polarity TNC males
- 2 Reverse Polarity TNC females
- 1 BNC males
- 1 BNC females
- 1 MMCX males
- 1 MMCX females

High Frequency Adapter Kits

These adapters are **made from high quality materials** to ensure best **performance and low insertion loss** same standards as applied to the Universal Adapter Kits, **but, designed to work at high frequency ranges.** Listed below the High Frequency Adapter Kits are connectors it comes with. Our **wi-fi** version comes with connectors more specifically targeted for all your wi-fi connection needs, such as reverse Polarity connectors for easier wireless LAN interconnects. The 25-HFAK-30-TGN and the 25-HFAK-30-WIFI-TGN comes packaged in a textured wooden case. The 25-HFAK-40-TGN comes packaged in a soft zippered leather case (textured wooden case optional). Both cases provides excellent protection, easy organization, and enhanced mobility.

25-HFAK-30-TGN

Standard High Frequency Adapter Kit includes:

6 universal centers

1 BNC Male	1 SMA Male	1 BNC Female	1 SMA Female
1 TNC Male	1 SSMA Male	1 TNC Female	1 SSMA Female
1 MCX Male	1 SMB Male	1 MCX Female	1 SMB Female
1 MMCX Male	1 SSMB Male	1 MMCX Female	1 SSMB Female
1 Mini-UHF Male	1 SMC Male	1 Mini-UHF Female	1 SMC Female
1 N Male	1 SMP Male	1 N Female	1 SMP Female

25-HFAK-30-WIFI-TGN

Wi-FI High Frequency Adapter Kit includes:

6 universal centers

1 BNC Male	1 N Male	1 BNC Female	1 N Female
1 BNC-RP Male	1 N-RP Male	1 BNC-RP Female	1 N-RP Female
1 TNC Male	1 SMA Male	1 TNC Female	1 SMA Female
1 TNC-RP Male	1 SMA-RP Male	1 TNC-RP Female	1 SMA-RP Female
1 MCX Male	1 FME Male	1 MCX Female	1 FME Female
1 MMCX Male	1 UHF Male	1 MMCX Female	1 UHF Female

25-HFAK-40-TGN

40 piece High Frequency Adapter Kit includes:

8 universal centers

1 BNC Male	1 N Male	1 BNC Female	1 N Female
1 BNC-RP Male	1 SMA Male	1 BNC-RP Female	1 SMA Female
1 TNC Male	1 SMA-RP Male	1 TNC Female	1 SMA-RP Female
1 TNC-RP Male	1 SMB Male	1 TNC-RP Female	1 SMB Female
1 MCX Male	1 SSMB Male	1 MCX Female	1 SSMB Female
1 MMCX Male	1 SMC Male	1 MMCX Female	1 SMC Female
1 UHF Male	1 FME Male	1 UHF Female	1 FME Female
1 Mini-UHF Male	1 FAKRA Male	1 Mini-UHF Female	1 FAKRA Female

LOW PIM Adapter Kits

4.1 / 9.5 ADAPTERS (Low PIM ≤ - 160 dBc)

The 4.1/9.5 RF connectors is our new product, its small size and low weight just to meet the increasing performance needs of mobile radio communication applications. Features of the 4.1/9.5 connectors are compact design, easy installation, and guarantee excellent return loss and low PIM levels.

APPLICATIONS

- Telecommunications
- DAS Networks
- Small Cell Systems
- Mobile Applications

PACKING: We supply two types of adapters with a black zippered leather case or a textured wooden case for your choosing.

7 piece kit contains one each:

- 4.1/9.5 Male to N Female Right Angle
- 4.1/9.5 Male to N Female
- 4.1/9.5 Male to 4.1/9.5 Female
- 4.1/9.5 Male to 4.1/9.5 Male
- 4.1/9.5 Female to 4.1/9.5 Female
- 4.1/9.5 Female to N Female
- 4.1/9.5 Female to N Male

25-AK4195-11-TGA

7 piece kit contains one each:

- 4.1/9.5 Male to DIN Male
- 4.1/9.5 Male to DIN Female
- 4.1/9.5 Female to DIN Male
- 4.1/9.5 Female to DIN Female
- 4.1/9.5 Male to 4.1/9.5 Female Right Angle
- 4.1/9.5 Male to 4.1/9.5 Female
- 4.1/9.5 Female to 4.1/9.5 Female

25-AK4195-716-TGA

4.3 / 10 ADAPTERS (Low PIM ≤ - 160 dBc)

The 4.3/10 RF connectors is our new product, this is a different size standard as compared to the 4.1/9.5 shown on the previous page. Features of the 4.3/10 connectors are similar to the 4.1/9.5, also compact design, easy installation, and guarantee excellent return loss and low PIM levels.

APPLICATIONS

- Telecommunications
- DAS Networks
- Small Cell Systems
- Mobile Applications

PACKING: We supply two types of adapters with a black zippered leather case or a textured wooden case for your choosing.

6 piece kit contains one each:

- 4.3/10 Male to DIN Female
- 4.3/10 Male to DIN Male
- 4.3/10 Female to DIN Male
- 4.3/10 Female to DIN Female
- 4.3/10 Female to 4.3/10 Male
- 4.3/10 Female to 4.3/10 Female

25-AK4310-716-TGA

6 piece kit contains one each:

- 4.3/10 Male to N Female
- 4.3/10 Male to N Male
- 4.3/10 Female to N Male
- 4.3/10 Female to N Female
- 4.3/10 Male to 4.3/10 Male
- 4.3/10 Female to 4.3/10 Female

25-AK4310-11-TGA

7/16 DIN ADAPTERS

The 7/16 DIN connector interface offers technical advantages over the N or SMA connector interfaces for cellular communications. Capable of carrying high power at high frequencies, 7/16 DINs are larger and more precise, offering more stable electrical and mechanical connections with tighter tolerances and improved VSWR performance.

Tri-metal, is tarnish free with excellent electrical performance and low PIM. The hardness of Tri-Metal will stand up to multiple mating cycles. If your application requires frequent coupling and de-coupling and/or if tarnish resistance is an issue, white bronze would be the better plating choice.

All Tri-Metal 7/16 DIN adapters are machined to exacting specifications, made of brass and feature Teflon insulation and gold-plated contacts.

6 piece kit contains one each:

- 7/16 DIN Female to N Male
- 7/16 DIN Male to N Female
- 7/16 DIN Male to N Male
- 7/16 DIN Female to N Female
- 7/16 DIN Female to 7/16 DIN Female

25-AK-716-TGA

MCX

27 Series

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-6GHz	
	DWV	1000VRMS min.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 5milliΩ
		Outer	≤2.5milliΩ
	Insulator	≥ 1000megaΩ	

27-01L-TGG

MCX Male Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

27-01L-TGG

MCX Male Crimp, Teflon Insulation, Gold Pin, Gold Plated Body, Right Angle, for TCC Cable Group L

MMCX

28 Series

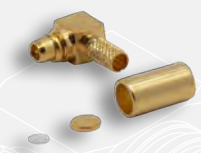
Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-6GHz	
	DWV	500VRMS min.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 5milliΩ
		Outer	≤2.5milliΩ
	Insulator	≥ 1000megaΩ	

28-01L-TGG

MMCX Male Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, for TCC Cable Group L

28-02L-9-TGG



MMCX Male Crimp, Telon Insulation, Gold Plated Pin, Gold Plated Body, Right Angle, for TCC Cable Group L

7/16 DIN

SCAN ME

Technical Characteristics

Electrical	Impedance	50Ω	
	Frequency Range	0-4GHz	
	DWV	2700VRMS max.	
VSWR	Straight	1.3 max.	
	Right Angle	1.5 max.	
Resistance	Contact	Center	≤ 0.4milliΩ
		Outer	≤ 0.2milliΩ
	Insulator	≥ 5000megaΩ	

30-01B-TSSN

7/16 DIN Male Clamp , Teflon Insulation, Silver Pin, Nickel Plated Body, for TCC Cable Group B

30-01L6-TSSN

7/16 DIN Male Clamp , Teflon Insulation, Silver Pin, Silver Plated Body, Nickel Rotary Head Knurled, for TCC Cable Group L6

30-01SJ1-EH-TSA

7/16 DIN Male Clamp , Teflon Insulation, Silver Pin, Tri-Alloy Plated Body, for TCC Cable Group SJ1

30-01T-TSSN

7/16 DIN Male Clamp , Teflon Insulation, Silver Pin, Silver Plated Body, Rotary Head Knurled, for TCC Cable Group T

30-02L6-TSSN

7/16 DIN Female Crimp, Teflon Insulation, Silver Pin, Silverl Plated Body, Rotary head Knurled, for TCC Cable Group L6

30-02T-TSSN

7/16 DIN Female Crimp, Teflon Insulation, Silver Pin, Silver Plated Body, for TCC Cable Group T

30-03C-TSSN

7/16 DIN Male Crimp, Teflon Insulation, Silver Pin, Silver Plated Body, Rotary Head Knurled, for TCC Cable Group C

30-03L6-TSSN

7/16 DIN Male Crimp, Teflon Insulation, Silver Pin, Silver Plated Body, Nickel Rotary Head Knurled, for TCC Cable Group L6

30-03S2-EH-TSA

7/16 DIN Male Crimp , Teflon Insulation, Silver Pin, Tri-Alloy Plated Body, for TCC Cable Group S2

30-03T-TSSN

7/16 DIN Male Crimp, Teflon Insulation, Silver Pin, Silver Plated Body, Rotary Head Knurled, for TCC Cable Group T

30-04L6-TSSN

7/16 DIN Female Crimp , Teflon Insulation, Silver Pin, Silver Plated Body, for TCC Cable Group L6

30-04T-TSSN

7/16 DIN Female Clamp, Teflon Insulation, Silver Pin, Silver Plated Body, for TCC Cable Group T

7/16 DIN

30-06T-TSSN

7/16 DIN Female Clamp , Teflon Insulation, Silver Pin, Silver Plated Body, Right Angle, and straight, for TCC Cable Group T

30-11-TSSN

Adapter, 7/16 DIN Female to N Male, Teflon Insulation, Silver Pin, Nickel Plated Body, Knurled

30-12-TSSN

7/16 DIN Adapter, 7/16 DIN Male to N Female , Teflon Insulation, Silver Pin, Nickel Plated Body, Knurled

30-13-TSS

Adapter, 7/16 DIN Female to 7/16 DIN Female , Teflon Insulation, Silver Pin, Silver Plated Body

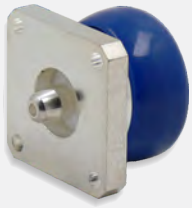
30-14-TSSN

Adapter, 7/16 DIN Male to 7/16 DIN Male, Teflon Insulation, Silver Pin, Nickel Plated Body, Knurled

30-17-TSS

7/16 DIN Male 4 hole Panel Mount, Teflon Insulation, Silver Pin, Silver Plated Body, Knurled, Soldering

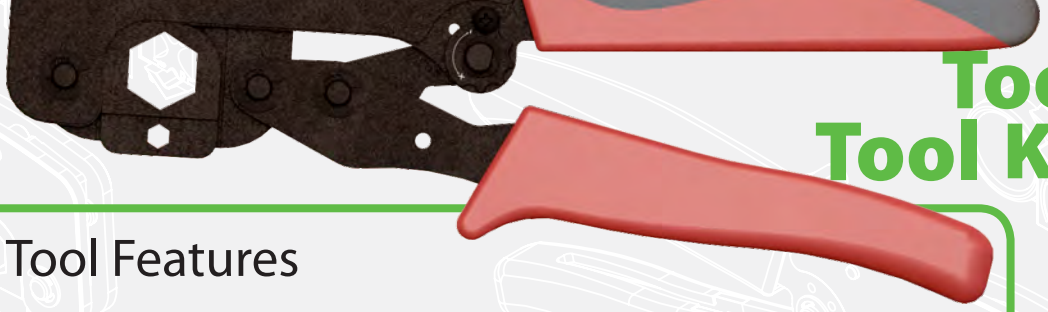
30-19-TSS



7/16 DIN Female 4 hole Panel Mount, Teflon Insulation, Silver Pin, Silver Plated Body, Soldering

30-21-TGSN

Adapter, 7/16 DIN Male to SMA Female , Teflon Insulation, Gold Pin, Nickel Plated Body



Tools
Tool Kits

Crimp Tool Features

Closing Ratchet Action	Keeps the pressure on to get the job done with much less efort
Replacable Dies	Keep your crimps perfectly hexed and secure without the expense of replacing the entire tool
Adjustable Pressure	Lets you choose exactly how much force the tool will use
Wide Tool Mouth	For easy crimping of larger connectors and cables
Ergonomic Grips	Keep your hands comfortable crimp after crimp, even when applying a lot of pressure

COAXIAL CONNECTORS CRIMP TOOLS

31-CT-L6R

Does not have replacable dies

0.61″ 15.5mm

0.186″ 4.72mm

Crimp tool for TCC cable groups L6

31-HT-336T1

0.151″ 3.84mm | 0.128″ 3.25mm | 0.1″ 2.54mm | 0.047″ 1.19mm | 0.039″ 0.99mm | 0.028″ 0.71mm

Crimp tool for TCC cable groups L and M

31-HT-336D2

0.429″ 10.9mm | 0.256″ 6.5mm | 0.213″ 5.41mm | 0.068″ 1.73mm

Crimp tool for TCC cable groups B D, F, G and L2

31-HT-336I

0.315″ 8mm | 0.254″ 6.45mm | 0.211″ 5.35mm | 0.093″ 2.36mm | 0.067″ 1.70mm

Crimp tool for TCC cable groups A F, G, L and L2

31-HT-336K

0.429″ 10.9mm | 0.128″ 3.25mm | 0.1″ 2.54mm

Crimp tool for TCC cable groups B D, L, N and T

31-HT-336K4

0.213″ 5.41mm | 0.190″ 4.83mm | 0.128″ 3.25mm | 0.100″ 2.54mm

Crimp tool for TCC cable groups F L and Fiber Optic

COAXIAL CONNECTORS CRIMP TOOLS

31-HT-336G3

0.324″ 8.23mm | 0.255″ 6.48mm | 0.068″ 1.73mm | 0.042″ 1.07mm

Crimp tool for TCC cable groups A F, G and L2

31-HT-336A4

0.255″ 6.48mm | 0.213″ 5.41mm | 0.187″ 4.75mm | 0.068″ 1.73mm

Crimp tool for TCC cable groups F G, L and L2

31-HT-336A

0.256″ 6.5mm | 0.213″ 5.41mm | 0.068″ 1.72mm

Crimp tool for TCC cable groups F G and L2

31-HT-336G

0.255″ 6.48mm | 0.213″ 5.41mm | 0.137″ 3.48mm | 0.1″ 2.54mm | 0.068″ 1.73mm | 0.043″ 1.09mm

Crimp tool for TCC cable groups F G, Z and L2

31-HT-336J

0.178″ 4.52mm | 0.151″ 3.84mm | 0.128″ 3.25mm | 0.078″ 1.98mm | 0.068″ 1.73mm | 0.042″ 1.07mm

Crimp tool for TCC cable groups L and N

31-HT-336M

0.305″ 7.75mm | 0.228″ 5.79mm | 0.068″ 1.73mm

Crimp tool for TCC cable groups A F, G and K

31-HT-336V

0.213″ 5.41mm | 0.151″ 3.84mm | 0.128″ 3.25mm | 0.1″ 2.54mm | 0.069″ 1.75mm | 0.043″ 1.09mm

Crimp tool for TCC cable groups F and L

31-HT-336V1

0.330″ 8.38mm | 0.256″ 6.50mm | 0.217″ 5.51mm | 0.178″ 4.52mm | 0.068″ 1.73mm | 0.047″ 1.19mm

Crimp tool for TCC cable groups A G, L, L2 and Fiber Optic

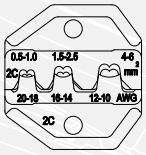
Tools
Tool Kits

WIRE TERMINAL CRIMP TOOLS

31-HT-513C
31-HT-336C

AWG 20-18/16-14/12-10
DIN 0.5-1/1.5-2.5/4-6mm^2
For Non-insulated terminal or open barrel terminal

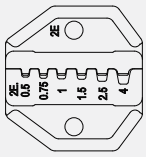
Installed Die



31-HT-513E
31-HT-336E

AWG 22/20/18/16/14/12
DIN 0.5/0.75/1.0/1.5/2.5/4mm^2
For Pin terminal insulated or non-insulated ferrules

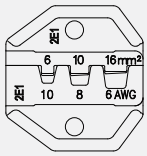
Installed Die



31-HT-513E1
31-HT-336E1

AWG 10/8/6
DIN 6/10/16 mm^2
For Pin terminal insulated or non-insulated ferrules

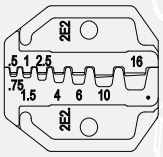
Installed Die



31-HT-513E2
31-HT-336E2

AWG 20-18/16-14/12-10
DIN 0.5-1/1.5-2.5/4-6mm^2
For Non-insulated terminal or open barrel terminal

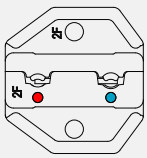
Installed Die



31-HT-513F
31-HT-336F

AWG 22-18/16-14
DIN 0.5-1.0/1.5-2.5 mm^2
For insulated flag terminal

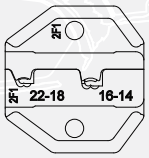
Installed Die



31-HT-513F1
31-HT-336F1

AWG 22-18/16-14
DIN 0.5-1.0/1.5-2.5 mm^2
For non insulated flag terminal

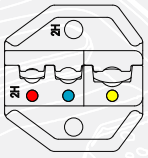
Installed Die



31-HT-513H
31-HT-336H

AWG 22-18/16-14/12-10
DIN 0.5-1.0/1.5-2.5/4-6 mm^2
For Insulated terminal

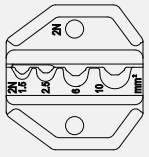
Installed Die



31-HT-513N
31-HT-336N

AWG 20-18/16-14/12-10/8
DIN1.5/2.5/6/10 mm^2
JIS 1.25/2.0/5.5/8 mm^2
For non insulated terminal

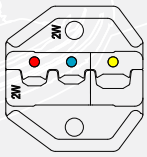
Installed Die



31-HT-513W
31-HT-336W

AWG 22-18/16-14/12-10
DIN 0.5-1.0/1.5-2.5/4-6 mm^2
For insulated terminal

Installed Die



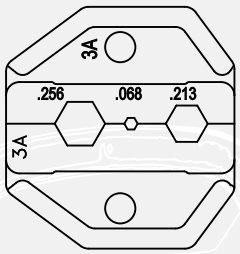
Tool
Tool Kits

Quick change device

31-HT-515FM
(Frame only)
9" (226mm)

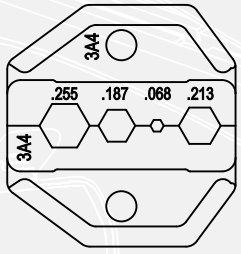
- **Designed as a "Quick Intercheageable Die Ratchet Crimper"**
- **Lower crimp force ratchet with a built-in safety release mechanism.**

Dies sets Compatible with 31-HT-336FM and 31-HT-515FM



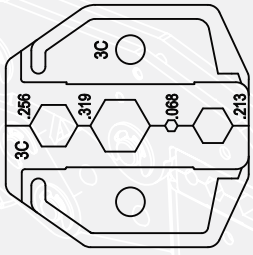
31-HT-3A

.256"/.068"/.213"
6.50/1.73/5.41mm
Die for TCC cable groups
F, G, L and L2



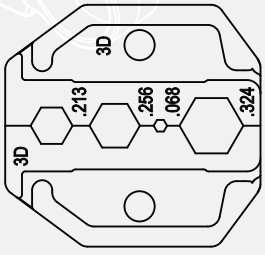
31-HT-3A4

.255"/.187"/.068"/.213"
6.48/4.75/1.73/5.41mm
Die for TCC cable groups
F, G, L and L2



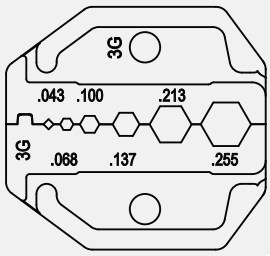
31-HT-3C

.256"/.319"/.068"/.213"
6.50/8.10/1.73/5.41mm
Die for TCC cable groups
A, F, G and L2



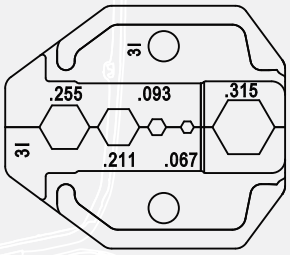
31-HT-3D

.213"/.256"/.068"/.324"
5.41/6.50/1.73/8.23mm
Die for TCC cable groups
A, F, G and L2



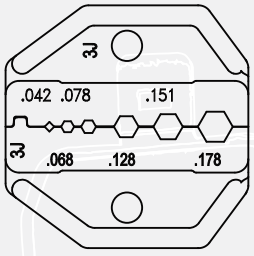
31-HT-3G

.043"/.068"/.100"/.137"/.213"/.255"
1.09/1.73/2.54/3.48/5.41/6.48mm
Die for TCC cable groups
F, G and L



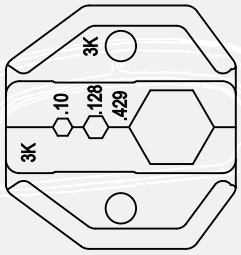
31-HT-3I

.255"/.211"/.093"/.067"/.315"
6.46/5.36/2.36/1.70/8.00mm
Die for TCC cable groups
A, F, G and L



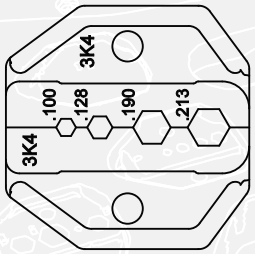
31-HT-3J

.042"/.068"/.078"/.128"/.151"/.178"
1.07/1.73/1.98/3.25/3.84/4.52mm
Die for TCC cable groups
L



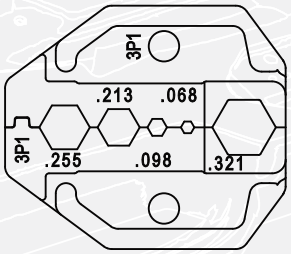
31-HT-3K

.100"/.128"/.429"
2.54/3.25/10.90mm
Die for TCC cable groups
B, D, L and T



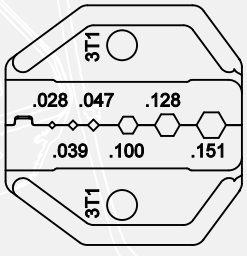
31-HT-3K4

.100"/.128"/.190"/.213"
2.54/3.25/4.83/5.41mm
Die for TCC cable groups
F, L and L2



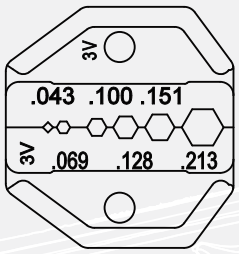
31-HT-3P1

.255"/.213"/.098"/.068"/.321"
6.48/5.41/2.49/1.73/8.15mm
Die for TCC cable groups
A, F, G and L2



31-HT-3T1

.028"/.039"/.047"/.100"/.128"/.151"
0.71/0.99/1.19/2.54/3.25/3.84mm
Die for TCC cable groups
L and M



31-HT-3V

.043"/.069"/.100"/.128"/.151"/.213"
1.09/1.75/2.54/3.25/3.84/5.41mm
Die for TCC cable groups
SMA, SMB, SMC and MCX

Tools
Tool Kits

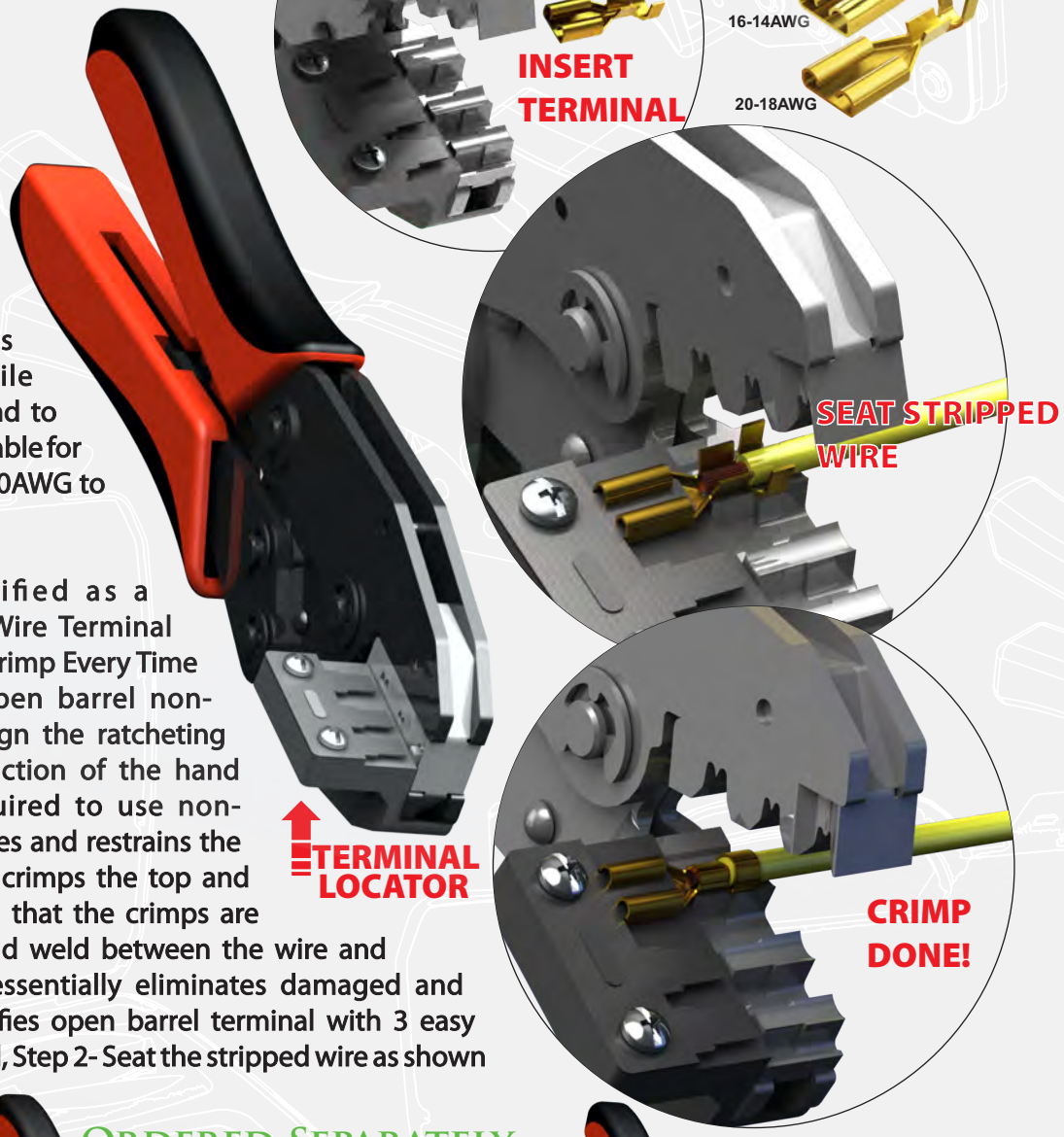
NEW PRODUCT

Open Barrel Crimping tool

Open Barrel Crimping tool with 6.3mm or 0.25" tab locator. The tab locator holds the terminal square while crimping, freeing up a hand to hold the cable in place. Suitable for wires from 0.5 – 6mm^2 or 10AWG to 20AWG.

This crimper is classified as a Professional Ratcheting Wire Terminal Crimper Tool. The Perfect Crimp Every Time for 10 thru 20 Gauge open barrel non-insulated Terminals - Design the ratcheting action requires only a fraction of the hand strength and effort required to use non-ratcheting crimpers captures and restrains the sides of the terminal as it crimps the top and bottom the design is such that the crimps are consistent in making a cold weld between the wire and barrel of the connector essentially eliminates damaged and distorted terminals. Simplifies open barrel terminal with 3 easy steps, Step1- Insert terminal, Step 2- Seat the stripped wire as shown and Step 3- Crimp... DONE.

Other significant features: adjustable tension, non-slip ergonomic handles to reduce fatigue/stress on your hands and open barrel crimping tool with 6.3mm tab locator. Makes crimping open barrel terminals easy by freeing up a hand.



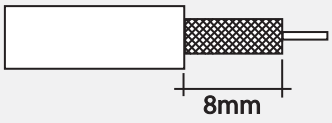
Ordered Separately

31-HT-5132C + 31-HT-5132CL = Open Barrel Crimping tool

Strip Tool Features

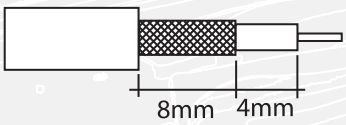
Easily Replacable Blades	Allows your tool to make consistantly clean and easy cuts
Adjustable Blade Depth	Most tools allow you to adjust the blade depth to it your cable perfectly
Adjustable Blade Spacing	Most tools allow you to adjust the blade spacing to customize the strip lengths to meet your needs
Simple Operation	Sqeeze the handle to open the tool mouth. Just release the handle and the tool clamps onto the cable, rotate the tool around the cable to strip.

31-HT-322S



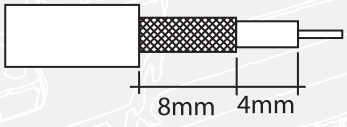
Strip tool for TCC cable group B

31-HT-322



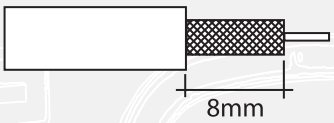
Strip tool for TCC cable groups A, F and G

31-HT-322S3



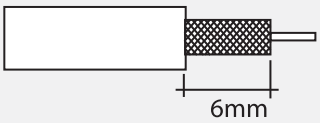
Strip tool for TCC cable groupsB and D

31-HT-332D



Strip tool for TCC cable group L

31-HT-332



Strip tool for TCC cable groups A, F and G

Tools
Tool Kits

COAX Quick Interchangeable Ratchet Crimper Tool Kit (31-KT-515)

The Kit Contains:

Ratchet Crimping Tool Frame 31-HT-515FM

Cable cutter 31-HT-206
- For wire O.D. up to 0.41"

Crimp Die 31-HT-3A4 (Initially Installed)
- .255"/.187"/.068"/213"
  6.48/4.75/1.73/5.41mm
- For RG58, 59, 62, 174
  TCC Cable Groups F, G, L, L2

Crimp Die 31-HT-3C
- .256"/.319"/.068"/.213"
  6.50/8.10/1.73/5.41mm
- For RG58, 59, 62, 6
  TCC Cable Group A, B, F, G

Crimp Die 31-HT-3G
- .043"/.068"/.100"/.137"/.213"/.255"
  1.09/1.73/2.54/3.48/5.41/6.48mm
- For RG58, 59, 62, 174, Fiber Optic
  TCC Cable Group F, G, L, L2, K

Crimp Die 31-HT-3J
- 042"/.068"/.078"/.128"/.151"/.178"
  1.07/1.73/1.98/3.25/3.84/4.52mm
- For RG174, 179, Belden 8218, Fiber Optic
  TCC Cable Group L, N

Crimp Die 31-HT-3K
- .100"/.128"/.429"
  2.54/3.25/10.90mm
- For RG8, 11, 174, 179, 213, LMR400
  TCC Cable Group B, D, L, N, T

COAX Quick Interchangeable Ratchet Crimper Tool Kit (31-KT-435C)

The Kit Contains:

Ratchet Crimping Tool Frame 31-HT-435FM

Crimp Die 31-HT-43A4
- .255"/.187"/.068"/.213"
  6.48/4.75/1.73/5.41mm
- For RG58, 59, 62, 174
  TCC Cable Groups F, G, L, L2

Crimp Die 31-HT-43C
- .256"/.319"/.068"/.213"
  6.50/8.10/1.73/5.41mm
- For RG58, 59, 62, 6
  TCC Cable Group A, B, F, G

Crimp Die 31-HT-43G
- .043"/.068"/.100"/.137"/.213"/.255"
  1.09/1.73/2.54/3.48/5.41/6.48mm
- For RG58, 59, 62, 174, Fiber Optic
  TCC Cable Group F, G, L, L2, K

Crimp Die 31-HT-43J
- .042"/.068"/.078"/.128"/.151"/.178"
  1.07/1.73/1.98/3.25/3.84/4.52mm
- For RG174, 179, Belden 8218, Fiber Optic
  TCC Cable Group L, N

Crimp Die 31-HT-43K
- .100"/.128"/.429"
  2.54/3.25/10.90mm
- For RG8, 11, 174, 179, 213, LMR400
  TCC Cable Group B, D, L, N, T

Wire Terminal Quick Interchangeable Ratchet Crimper Tool Kit (31-KT-435T)

The Kit Contains:

Ratchet Crimping Tool Frame 31-HT-435FM

Crimp Die 31-HT-42H
- AWG 22-18/ 16-14/ 12-10
  DIN 0.5-1/ 1.5-2.5/ 4-6mm^2
- For Insulated Terminal

Crimp Die 31-HT-42C
- AWG 20-18/ 16-14/ 12-10
  DIN 0.5-1/ 1.5-2.5/ 4-6mm^2
- For Non-Insulated Terminal or Open Barrel Terminal

Crimp Die 31-HT-42E2
- AWG 22/ 20/ 18/ 16/ 14/ 12/ 10/ 8/ 6
  DIN 0.5/ 0.75/ 1.0/ 1.5/ 2.5/ 4/ 6/ 10/ 16 mm^2
- For Pin Terminal Insulated or Non-Insulated Ferrules

Crimp Die 31-HT-42N
- AWG 20-18/ 16-14/ 12-10/ 8
  DIN 1.5/ 2.5/ 6/ 10 mm^2
  JIS 1.25/ 2.0/ 5.5/ 8 mm^2
- For Non-Insulated Terminals

Crimp Die 31-HT-42C3
- AWG 24-30/ 18-22
  DIN 0.25-0.05/ 1.0-0.35 mm^2
- For D-Sub Terminal

Surge Protectors

SCAN ME

Technical Characteristics

Electrical	Impedance	50Ω
	Frequency Range	1, 3, or 6GHz
	VSWR	1.5 max.
	Max Withstand Current	5kV
	RF Power Rating	15W
Protection Element	Breakdown Voltage	90V±15%
	Impulse Breakdown	≤700V
	Insulation Resistance	≥10000megaΩ

34-11-FF3-TGN

Surge Protector Adapter, N Female to N Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, 3GHz

34-11-FF6-TGN

Surge Protector Adapter, N Female to N Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, 6GHz

34-11-MF3-TGN

Surge Protector Adapter, N Male to N Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, 3GHz

34-11-MF6-TGN

Surge Protector Adapter, N Male to N Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, 6GHz

34-13-FF1-TGN

Surge Protector Adapter, BNC Female to BNC Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, 1GHz

34-13-MF1-9-TGN

Surge protector Adapter. BNC Male to BNC Female, Telon Insulation, Gold Plated Pin, Nickel Plated Body, 75 Ohm

34-15-MF6-RP-TGN

Surge Protector Adapter, TNC Male to TNC Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, 6 GHz

34-19-MF6-RP-TGN

Surge Protector Adapter, SMA Male to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, Reverse Polarity, 6GHz

34-19-MF6-TGN

Surge Protector Adapter, SMA Male to SMA Female, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, 6GHz

34-TUBE-90
34-TUBE-230
34-TUBE-600

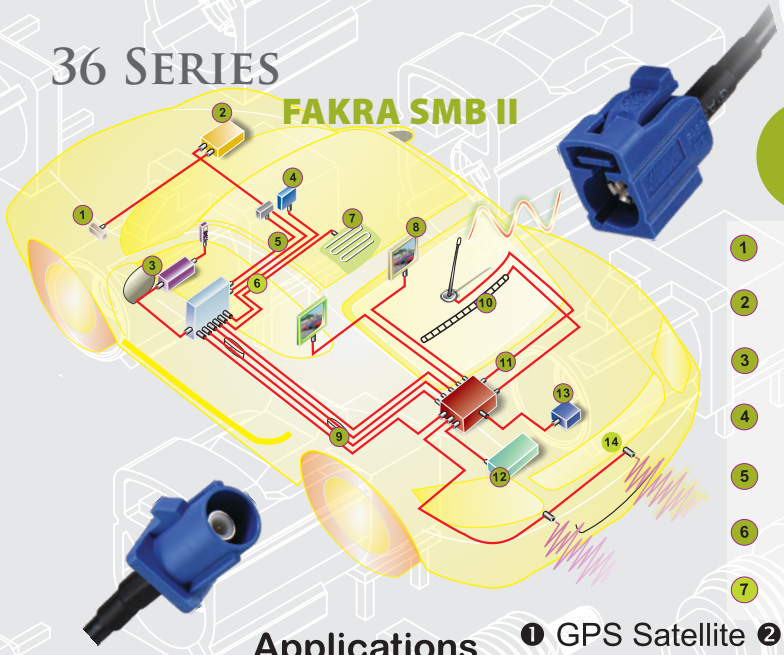
Gas Tube Element For Lightning Surge Protectors

34-BRACKET-N

Bracket For Lightning Surge Protectors, N Female Side

Automotive Connection Systems

FAKRA SMB II



1. Air pressure control
2. Engine management system
3. Cellular phone
4. Navigation system
5. Analog radio
6. Distributor box
7. Auxiliary heating
8. TV / Video-displays
9. Remote keyless entry
10. Antenna
11. Amplifier
12. Accident data analysis
13. GPS Antenna
14. Distance Control

Applications ❶ GPS Satellite ❷ Radio ❸ Cellular ❹ Mobile TV ❺ Vehicular internet access ❻ Bluetooth

Jack	Application	Color	RAL	Coding	Plug
	Analog radio without phantom supply	Black	9005	A	
	Phantom radio with supply	White	9001	B	
	GPS:Telematics Navigation	Blue	5005	C	
	GSM: Cellular phone	Bordeaux	4004	D	
	TV 1	Green	6002	E	
	TV2	Brown	8011	F	
	Remote control keyless entry	Grey	7031	G	
	Radio controlled parking heating	Violet	4003	H	
	Bluetooth	Beige	1001	I	
	Radio with IF output (antenna diversity)	Curry	1027	K	
	Neutral coding	Water Blue	5021	Z	

FAKRA SMB which meet the requirements of automotive electronics in the field of telematics, multimedia, safety and security.

FAKRA SMB interface are based on the proven SMB standard and includes an additional plastic housing.

This housing contains a mechanical locking device that prevents disconnect in high vibration environments there are 11 different mechanical and color codes in our products.

afaq ISO 9001 Quality

nqa TS 16949 Registered Automotive Management

SPECIFICATIONS

Electrical	
Impedance	50 Ω
Frequency Range	0 – 4 GHz
V.S.W.R.	≤ 1.3 (straight)
Insulation Resistance	1000 MΩ
Dielectric Withstanding Voltage	≥ 8000 VRMS @ sea level
Mechanical	
Durability (Matings)	25 cycles min.
Plastic housing retention force	≥ 90 N
Cable retention force	≥ 100 N
Temperature range	-40°C to +105°C
Material	
Insulator	PTFE
Female, male body & center contact	Brass
Female center contact	Bronze
Plastic Housing	PA66

FAKRA SMB II

(*)	A	B	C	D	E	F	G	H	I	K	Z
JACK											
PLUG											

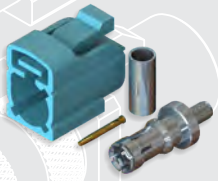
36-01L-(*)-IP68-TGN

FAKRA Jack Crimp, Code (*) Straight, Waterproof IP68, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-02L-(*)-IP68-TGN

FAKRA Plug Crimp, Code (*) Straight, Waterproof IP68, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-01L-(*)-R-TGN



FAKRA Jack Crimp, Code (*) Straight, "Rotary" PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

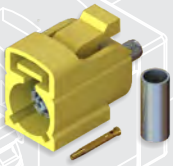
36-16L-(*)-TGN

FAKRA Plug Crimp, Bulkhead, Code (*) Straight, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-01F-6-(*)-TGN

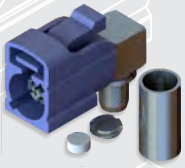
FAKRA Jack Crimp, Code (*), Straight, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

36-01L-12-(*)-TGN



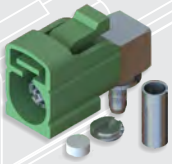
FAKRA Jack Crimp, Code (*), Straight, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-03F-(*)-TGN



FAKRA Jack Crimp, Right Angle, Code (*) PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

36-03L-(*)-TGN



FAKRA Jack Crimp, Right Angle, Code (*) PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-02F-(*)-TGN

FAKRA Plug Crimp, Straight, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group F

36-02L-(*)-TGN

FAKRA Jack Crimp, Straight, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-02L-(*)-R-TGN

FAKRA Plug Crimp, Code (*) Straight, "Rotary" PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body, for TCC Cable Group L

36-06-(*)-TGN

FAKRA Plug, Straight, PCB Mount, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-07-(*)-TGN

FAKRA Jack, Straight, PCB Mount, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

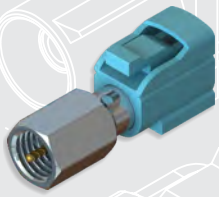
36-08-(*)-TGN

FAKRA Plug, Right Angle, PCB Mount, PA66 Housing, Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-43-23-Z-TGN

Adapter, FME Male, to FAKRA Female Water Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Bod y.

36-44-23-Z-TGN



Adapter, FME Male, to FAKRA Male Water Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

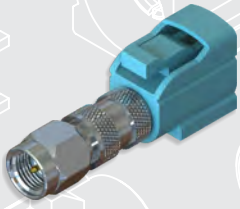
36-34-23-Z-TGN

Adapter, FME Female, to FAKRA Male Water Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-33-23-Z-TGN

Adapter, FME Female to FAKRA Female Water Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-43-19-Z-TGN

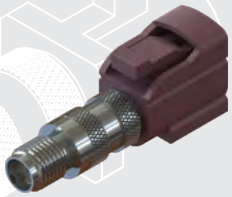


Adapter, SMA Male, to FAKRA Female Water Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-34-19-C-TGN

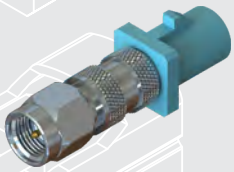
Adapter, SMA Female to FAKRA Male Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-33-19-C-TGN



Adapter, SMA Female to FAKRA Female Bordeaux (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

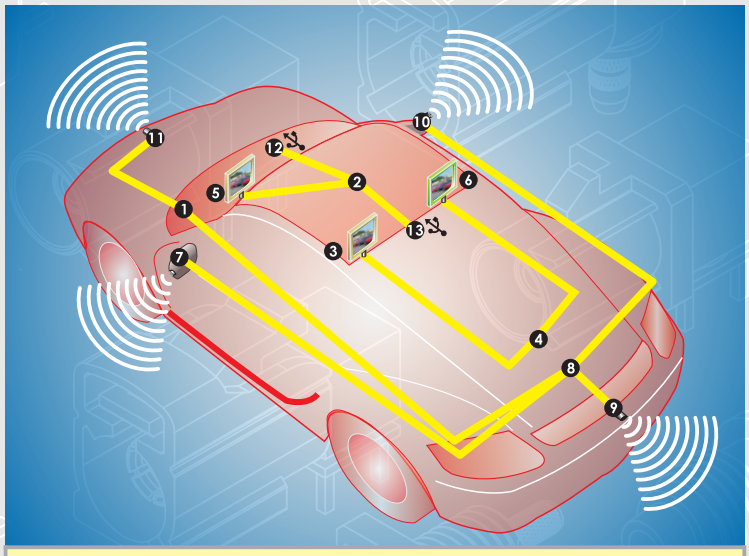
36-44-19-Z-TGN



Adapter, SMA Male, to FAKRA Male Water Blue (PA66 Housing), Teflon Insulation, Gold Plated Pin, Nickel Plated Body.

36-4R4R-36-Z-12-TGN

ADAPTER Straight, FAKRA Rotary Plug to FAKRA Rotary Plug, Key C,ode: Z, Color: Water Blue, BULKHEAD



The Increased adoption of telematics in the automotive industry has driven the demand for high speed data communication system in vehicles. TCC Industries has responded to this demand with the introduction of the HSD (High Speed Data) product portfolio. HSD interconnect products focus on various application areas in the automobile, such as the inside compartment for connection to displays, head units and rear seat entertainment modules.

The product portfolio can be used in combination with a variety of protocols such as LVDS camera (Low Voltage Differential Signaling), GVIF (Gigabit Video interface), USB, IEEE 1394 as well as Ethernet protocols.

HSD APPLICATION

Control System

1. Inline Connection
2. Head Unit

Entertainment & Convenience System

3. Rear Seat Display
4. Rear Seat Entertainment Module
5. Display
6. Rear Seat Display

Safe & Security System

7. Side View Camera
8. Camera Module
9. Rear View Camera
10. Side View Camera
11. Front View Camera

Information System

12. USB Connection
13. USB Connection

HSD SPECIFICATIONS

Electrical	
Impedance	100 Ω
Frequency Range	DC – 2 GHz
Insertion Loss	0.1 dB max from DC – 1 GHz
Insulation Resistance	1000 MΩ MIN.
Contact Resistance	
Center Contact	≤ 10 MΩ MIN.
Outer Contact	≤ 7.5 MΩ MIN.
Dielectric Withstanding Voltage	At Sea Level: > 250 VRMS (Interface only)

Environmental	
Temperature Range	-40°C to + 105°C
Thermal Shock	DIN EN 60068-2-14
Vibration	DIN EN 60068-2-64
Mechanical Shock	DIN EN 60068-2-27

Mechanical	
Durability (matings)	25 min
Plastic Housing-Engagement Force	≤ 30 N
Plastic Housing-Disengagement Force	≥ 5 N
Cable Retention Force	≥ 110 N
Coding	Mechanical and Color Keyed Mating Specs

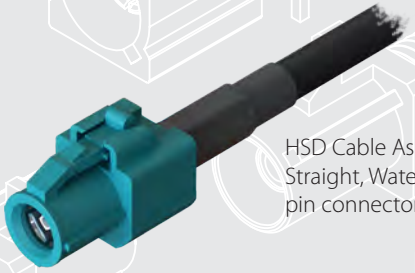
Material			
Parts Name		**Material**	**Finish**
Housing		PA 66	Color per key code
Insertion Loss	Male	P. Bronze	Gold
	Female	P. Bronze	Gold
Body, Metal Parts		Brass	Nickel – (Gold)
Insulators		LCP / PA 66	

Coding	Jack	Plug	Color/RAL -Nr.
A			Black/ 9005
B			White/ 9001
C			Blue/ 5005
D			Bordeaux/ 4004
E			Green/ 6002
F			Brown/ 8011
Z			Water Blue/ 5021
G			Grey/ 7031
H			Violet/ 4003
J			Beige/ 1001
K			Curry/ 1027
L			Yellow Green/ 6018
M			Pastel Orange/ 2003
O			Light Green/ 6027

HSD HIGH SPEED DATA

(*)	A	B	C	D	E	F	Z	G	H	I	K	L	M	O
JACK														
PLUG														

36H-01DA535-(*)-IP68-PGN



HSD Cable Assembly, Code (*) Straight, Waterproof IP68, Jack, 4-pin connector

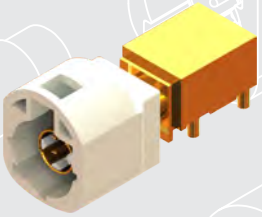
36H-02DA535-(*)-IP68-PGN

HSD Cable Assembly, Code (*) Straight, Waterproof IP68, Plug, 4-pin connector

36H-05-(*)-LGG

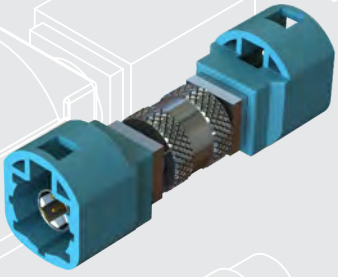
HSD Jack, Code (*) Straight Plug, 4-pin connector PCB Mount

36H-06-(*)-LGG



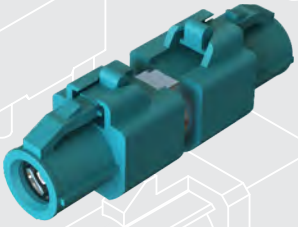
HSD Jack, Code (*) Right Angle Plug, 4-pin connector PCB Mount

36H-44-36H-Z-PGN



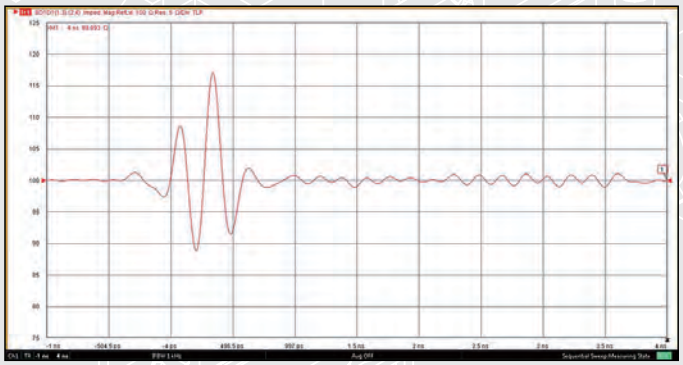
ADAPTER Straight, HSD Jack to HSD Jack, Key C,ode: Z, Color: Water Blue.

36H-33-36H-Z-PGN

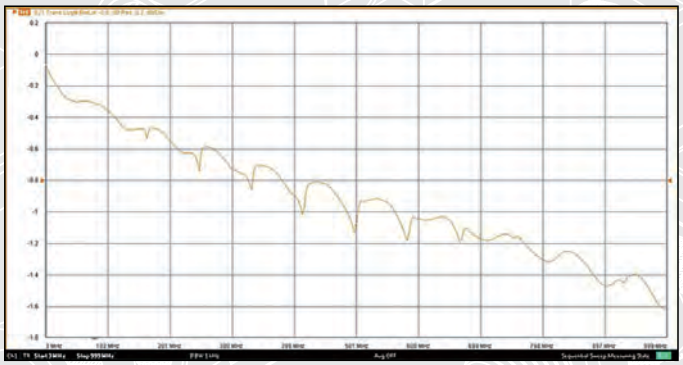


ADAPTER Straight, HSD Plug to HSD Plug, Key C,ode: Z, Color: Water Blue.

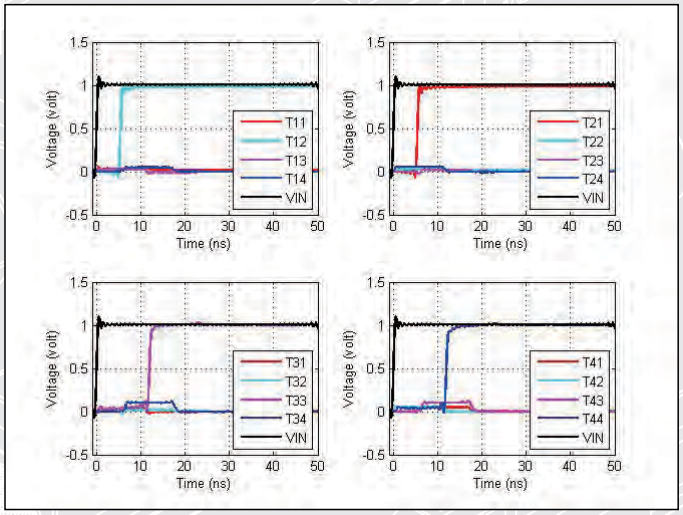
HSD ELECTRICAL TEST



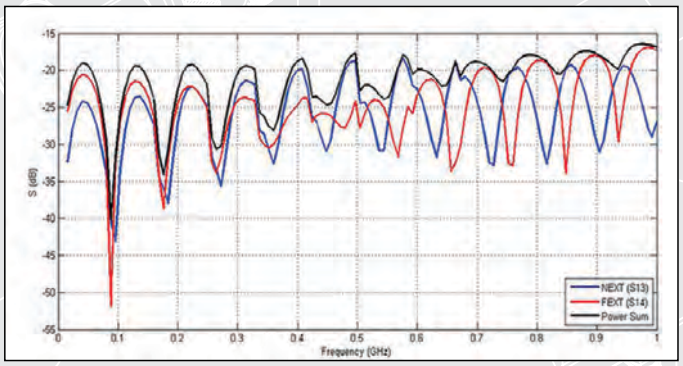
IMPEDANCE



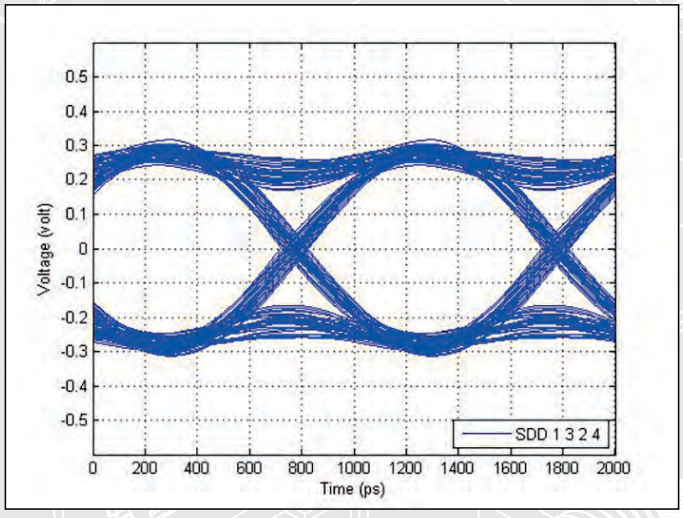
INSERTION LOSS



INTRA PAIR SKEW



CROSSTALK



EYE DIAGRAM

1.85mm

1.85mm connectors are precision connectors designed to perform to 65 GHz. The 1.85mm connector is often referred to as a "V" connector. Their overall size is similar to SMA connectors, but they are not intermateable. The 1.85mm connector is mechanically compatible and intermateable with the 2.4mm connector family. The center contact pin of both the 1.85mm and 2.4mm connectors is .020" (.51mm).

The 1.85mm connectors are used in test and measurement applications where reliability in performance is crucial for repeatable and critical high frequency testing.

The 1.85mm interface is designed to insure the outer conductors engage and align before the center contacts engage preventing damage to the center contact. The 1.85mm connector is mechanically compatible with the 2.4mm connector series.

Technical Characteristics

Electrical

Impedance		50Ω
Frequency Range		0 – 67 GHz
Insertion Loss		0.6 dB max.
VSWR		1.5 max.
Contact Resistance	Center Contact	4 milliΩ max
	Outer Contact	2.5 milliΩ max

Material

Connector Body Parts	Stainless Steel	Passivated Finish
Center Contacts	Male: Phosphor Bronze	Gold 15 µin.
	Female: Beryllium copper	Gold 15 µin.
Insulators	PPO	

37-185-13-PGP

Adapter, 1.85mm Male to 1.85mm Male, PPO Insulation, Gold Pin, Passivated Finish Body, Hex Shell

37-185-09-PGP

Adapter, 1.85mm Female to 1.85mm Female, PPO Insulation, Gold Pin, Passivated Finish Body

37-185-15-PGP

Adapter, 1.85mm Female to 1.85mm Male, PPO Insulation, Gold Pin, Passivated Finish Body, Hex Shell

2.4mm

The 2.4mm connector is designed for superior higher frequency performance with ,an operating frequency of 50 Ghz.

The 2.4mm connector is mechanically compatible and intermateable with the 1.85mm connector family. The 2.4mm connector is mechanically compatible and intermateable with the 1.85mm connector family.

The primary application for this connector is for use as a port interface on test & measurement equipment or components that require superior performance at extended high frequencies

Technical Characteristics

Electrical

Impedance		50Ω
Frequency Range		0 – 50 GHz
Insertion Loss		0.6 dB max.
VSWR		1.35 max.
Contact Resistance	Center Contact	4 milliΩ max
	Outer Contact	2.5 milliΩ max

Material

Connector Body Parts	Stainless Steel	Passivated Finish
Center Contacts	Male: Phosphor Bronze	Gold 15 µin.
	Female: Beryllium copper	Gold 15 µin.
Insulators	PPO	

37-240-13-PGP

Adapter, 2.4mm Male to 2.4mm Male, PPO Insulation, Gold Pin, Passivated Finish Body, Hex Shell

37-240-09-PGP

Adapter, 2.4mm Female to 2.4mm Female, PPO Insulation, Gold Pin, Passivated Finish Body

37-240-15-PGP

Adapter, 2.4mm Female to 2.4mm Male, PPO Insulation, Gold Pin, Passivated Finish Body, Hex Shell

2.92mm

2.92mm connector also named "K" connector or simply 2.9 millimeter, it's a precision connector designed to perform mode free to 40GHz. Their interface is similar to SMA connectors, but utilizes an air dielectric and a smaller internal body diameter support for higher cutoff frequency.

The outer conductor measures 2.92mm with a strong outer body wall compared to dielectric loaded interfaces of comparable size.

2.92mm connectors are mechanically compatible with SMA and 3.5mm connectors, but the male center pin is, shortened to allow outer conductor engagement before the center contacts mate, preventing damage to the female contact pins.

Our current line offers 2.92mm connectors for semi-rigid and flexible cable, receptacles and precision adapters which may be adapted for custom applications.

Technical Characteristics

Electrical

Impedance		50Ω
Frequency Range		0 – 40 GHz
Working Voltage		250 VRMS max.
Dielectric Withstanding Voltage		750 VRMS max.
VSWR	Straight	1.2 max.
	Right Angle	1.4 max.
Contact Resistance	Center Contact	4 milliΩ max
	Outer Contact	2.5 milliΩ max
Insulator Resistance		5000 megΩ min.

Material

Connector Body Parts	Stainless Steel	Passivated Finish
Center Contacts	Male — Phosphor Bronze	Gold 15 µin.
	Female — Beryllium copper	Gold 15 µin.
Insulators	PPO	
Clamp Gaskets	Silicone Rubber	

37-292-01S1-PGP

2.92mm Straight Male Solder, PPO Insulation, Gold Pin, Passivated Finish Body, Passivated Finish Hex Shell for TCC Cable Group S1

37-292-01S2-PGP

2.92mm Straight Male Solder, PPO Insulation, Gold Pin, Passivated Finish Body, Passivated Finish Hex Shell for TCC Cable Group S2

37-292-03S1-PGP

2.92mm Straight Female Solder, PPO Insulation, Gold Pin, Passivated Finish Body, for TCC Cable Group S1

High Frequency

2.92mm

37-292-03S2-PGP

2.92mm Straight Female Solder, PPO Insulation, Gold Pin, Passivated Finish Body, for TCC Cable Group S2

37-292-11-PGP

2.92mm Male 4 Hole Panel Mount, PPO Insulation, Gold Pin, Passivated Finish Body, Passivated Finish Hex Shell

37-292-12-PGP

2.92mm Female 4 Hole Panel Mount, PPO Insulation, Gold Pin, Passivated Finish Body

37-292-15-PGP

Adapter, 2.92mm Male to 2.92mm Male, PPO Insulation, Gold Pin, Gold Finish Body, Passivated Finish Hex Shell

37-292-16-PGP

Adapter, 2.92mm Female to 2.92mm Female, PPO Insulation, Gold Pin, Gold Finish Body

37-292-17-PGP

Adapter, 2.92mm Male to 2.92mm Female, PPO Insulation, Gold Pin, Gold Finish Body, Passivated Hex Shell.

SMP

SMP subminiature connectors offer excellent performance from DC to 40 GHz. It is commonly used in miniaturized high frequency coaxial modules and is offered in both push-on and snap-on mating styles. The PCB mount, cable mount and in-series adapters provide an interconnect application for board-to-board and blind mate applications while maintaining package density.

The SMP interface styles provides three different levels of retention force, Full Detent (FD) for maximum retention, Limited Detent (LD) for medium retention and Smooth Bore (SB) for minimum retention, to cover a wide range of applications.

Technical Characteristics

Electrical

Impedance			50Ω
Frequency Range	Connectors for Semi-Rigid Cable		0 – 40 GHz
	In-Series Adaptors, End Launch		0 – 18 GHz
	PCB Mount		0 – 12 GHz
Insertion Loss			5000 megΩ min.
VSWR			1.30 : 1 max.
VSWR	Connectors for Semi-Rigid Cable		1.2 max 0 - 18 GHz 1.35 max 18 - 26.5 GHz 1.7 max 26.5 - 40 GHz
Contact Resistance	Center Contact		6 milliΩ max
	Outer Contact		2 milliΩ max

Material

Connector Body Parts	Brass		Gold
Center Contacts	Male	Brass	Gold
	Female	Beryllium copper	Gold
Insulators	Teflon		
Crimp Ferrules	Annealed Copper or Brass		Finish same as Body

37-SMP-02S1-TGG

SMP Straight Female, Solder, Teflon Insulation, Gold Pin Gold finish Body, for TCC Cable Group S1

37-SMP-03S1-TGG

SMP Right Angle Female, Solder, Teflon Insulation, Gold Pin, Gold finish Body for TCC Cable Group S1

37-SMP-07-TGG

SMP Male, Straight, Edge Mount Plug Receptacle, Teflon Insulation, Gold Pin Gold Finish Body

37-SMP-09-TGG

Adapter, SMP Female to SMP Female, Teflon Insulation, Gold Pin Gold Finish Body

37-SMP-11-TGG

SMP Male Straight for PCB Mount, Teflon Insulation, Gold Pin Gold Finish Body

37-SMP-13-TGG

Adapter, SMP Male to SMP Male, Teflon Insulation, Gold Pin Gold Finish Body

High Frequency

3.5mm

SMA 3.5mm and 2.92 connectors, these three connector styles use air dielectric, and will mate with each other as well as the cheaper SMA styles. The 3.5 mm connector is the next upgrade from using SMA, it performs well up to 34 Ghz.

Our current line offers 2.92mm connectors for semi-rigid and flexible cable, receptacles and precision adapters which may be adapted for custom applications.

Technical Characteristics

Electrical

Impedance		50Ω
Frequency Range		0 – 34 GHz
Insertion Loss		0.3 dB max.
VSWR		1.2 max.
Contact Resistance	Center Contact	3 milliΩ max
	Outer Contact	2 milliΩ max

Material

Connector Body Parts	Stainless Steel	Passivated Finish
Center Contacts	Male: Phosphor Bronze	Gold 15 µin.
	Female: Beryllium copper	Gold 15 µin.
Insulators	PPO	

37-350-13-PGP

Adapter, 3.5mm Male to 3.5mm Male, PPO Insulation, Gold Pin, Gold Finish Body, Passivated Finish Hex Shell

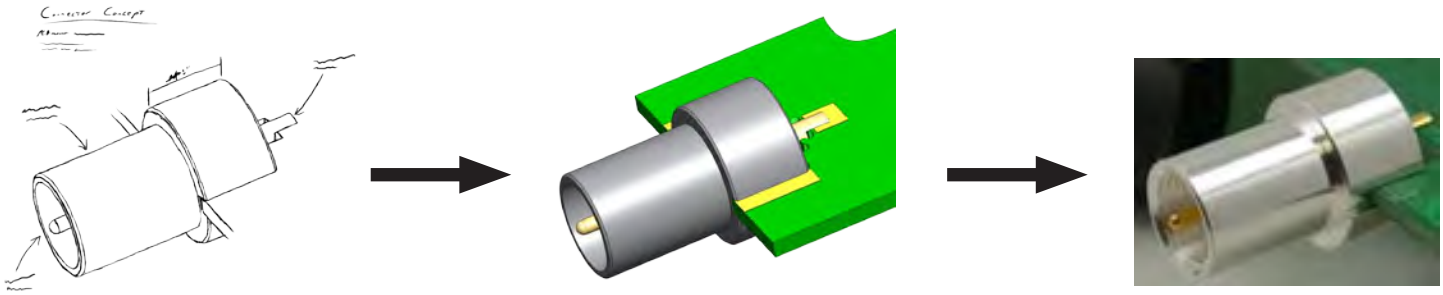
37-350-09-PGP

Adapter, 3.5mm Female to 3.5mm Female, PPO Insulation, Gold Pin, Gold Finish Body

37-350-15-PGP

Adapter, 3.5mm Female to 3.5mm Male, PPO Insulation, Gold Pin, Gold Finish Body, Passivated Finish Hex Shell

Custom Design & Production Solutions



Whether you're a small or large business, if you have a concept for a unique RF product or need a custom RF component to integrate into your product, get an edge with TCC custom design and production solutions.

Why use workarounds in order to integrate a standard product or component into your product design? Save yourself time, hassle, and cost by using a custom component that integrates seemlessly. **Components designed speciically for your application are almost guaranteed to have better performance and they pay for themselves many times over in saved production and/or assembly costs.**

So, why choose TCC?

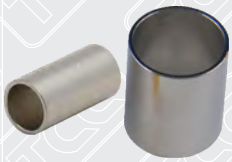
- For over 30 years, we at TCC have guided our customers through the process of making their products and RF components a reality.
- From concept through production our professional engineering team assists in assessing your application's needs and designing solutions that meet your exacting speciications.
- We have the ability to support numerous design platforms such as AutoCAD and SolidWorks to ensure that we work in the medium that's most comfortable for you and your business.
- We can provide low cost engineering samples for testing.
- When it comes time for production, TCC ofers ISO9002 certiied manufacturing facilities in Taiwan and China that are strictly monitored ensuring that your high standards are met at an afordable price.
- With our experience and capabilities TCC can ofer you complete turnkey solutions which can greatly speed up your time-to-market response.

MISCELLANEOUS PARTS

Connector Pins

We carry connector PIN's. Call for availability!

Ferrule



We carry connector Ferrule for TCC cable Groups. Call for availability!

Strain Relief

20-SR-58-188L
Strain Relief, for TCC Cable Group L

20-SR-58L
Strain Relief, for TCC Cable Group F

20-SR-58MU-02
Strain Relief, for TCC Cable Group F

Connector Nuts and Washer

We carry connector Nuts and Washer. Call for availability!

Lugs

11-17-LUG
Loose Lug, Nickel Plated Body

20-LUG-N
Loose Lug, Nickel Plated Body, 15.97mm

20-LUG-RA-N
Loose Lug, Nickel Plated Body

Cable Feeds

20-58L-N
Cable Feed Through, Nickel Plated Body, for TCC Cable Group L

20-59F-N
Cable Feed Through, Nickel Plated Body, for TCC Cable Group F

MISCELLANEOUS PARTS

Cigarette lighter adapter

Cigarette lighter plug. Includes 10 ampere AGC fuse.

Cigarette lighter socket, assembly type.

Heat Shrinks

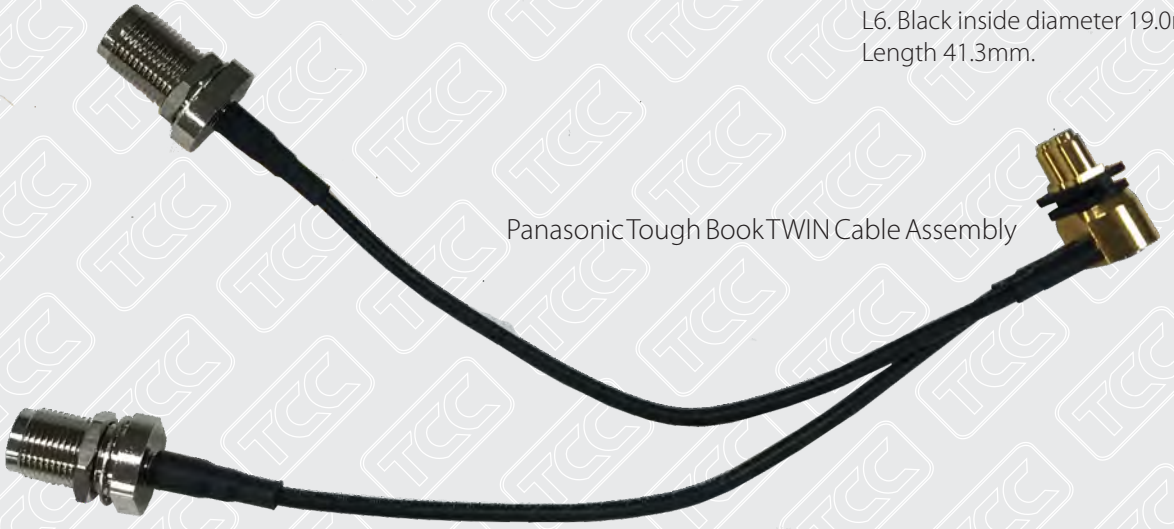
Heat shrink used for weather proofing. Will provide adequate protective seal on connector-cable joints.

20-HST-9.5
Heat Shrink Tube for TCC Group F, L1, L2, & L3, Black. Inside Diameter 9.5mm, Length 25.4mm.

20-HST-12.7
Heat Shrink Tube for TCC Cable Group B, C & T. Black. Inside diameter 12.7mm. Length 41.275mm.

20-HST-19.6
Heat Shrink Tube for TCC Cable Group L6. Black inside diameter 19.0mm, Length 41.3mm.

Cable Assemblies



Panasonic Tough Book TWIN Cable Assembly

RF CONNECTOR ORDERING GUIDE

1	1	-	0	3	F	-	R	P	-	T	G	N

Series

Style
See picture pages

TCC Cabe Group

A	6/U, 6A/U; CommScope 5715, 5729, 5765, 2278, 2279; Belden 1694A, 9248, 1695A, 82120, 82248, 87120, 89120, 89248
B	213/U, 8A/U; Belden 8267, 9251, 9880, 89880; Times AA-4478; Alpha 9008, 9213
C	214/U, RG-9, 9A, 9B, 9B/U; Belden 8242, 8268; Alpha 9214
D	11/U; Belden 8213, 8238, 8261, 9011, 9292; CommScope 3247, 5901, 5903, 5908, 5909, 5916, 5916R, 5918
F	58, 58A/U, 58C, 141, 141A/U, 122/U; Times LMR-195®, LMR-200-LLPL®; ; Belden 7806A, 8219, 8240, 8259, 8262, 9201, 9203, 9310, 931, 82240, 82907, 88240, 89907; CNT-195; WBC-195, 0268, TCOM-195; ALPHA 9859, 9158S
G	59, 59A, 59B, 62, 62A, 62C/U, 210/U; Belden 8221, 8241, 9169, 9204, 9228; Alpha 9059, 9062, 9830, 9840, 9845; CommScope 5550, 5555, 5560, 5563
H4	½" Helical, CommScope LDF4-50A
H5	7/8" Helical, CommScope LDF5-50A
K	55, 55A, 55B, 142, 142A, 142B, 142B/U, 223, 400/U; Belden 7806a, 83242, 84142; Alpha 9055, 9055B, 9223
L	174/U, 174, 188, 188A, 316/U; Belden 7805A, 8216, 83269, 83284, 84316; LMR-100A®; Alpha 9174, 9316; Commscope AMC-174, WBC-100
L1	LMR-200®, MSI-22; Alpha 9848; Belden 7807A; CommScope AMC-58II, WBC-200, TCOM-200
L2	LMR-240®; RG-8X; CNT-240; Belden 9258; TCOM-240, TCOM-240-FR, WBC-240, WBC-240R; Harbour HPF240; Micro 8/U; Remee 1600; Saxton 8315
L3	LMR-300®; CNT-300; Belden 7809; TCOM-300, WBC-300; aircell®7
L5	LMR®500; TCOM-500, WBC-500
L6	LMR®600; CNT 600; TCOM-600; WBC-600
M	178, 178/U.178A, 178B, 196, 196A/U; Belden 83265
S1	.085 Semi Rigid; RG-405/U; Belden 1671A; RD-179
S2	.141 Semi Rigid; TFT-402; RG-402/U; Belden 1673A
S3	.250 Semi Rigid; RG-401/U
SJ1	CommScope FSJ1-50A
SJ4	CommScope FSJ4-50A
T	LMR®400; Times AA-5886, AA-6 146; CNT-400; Belden 7810A, 8214, 9913; TCOM-400; WBC-400; Cushcraft Ultralink TL93605; Harbour HPF400; aircom®plus; ECOFLEX®10
Y	Proflex 800; Times AA-3096; Antenna Specialist K214

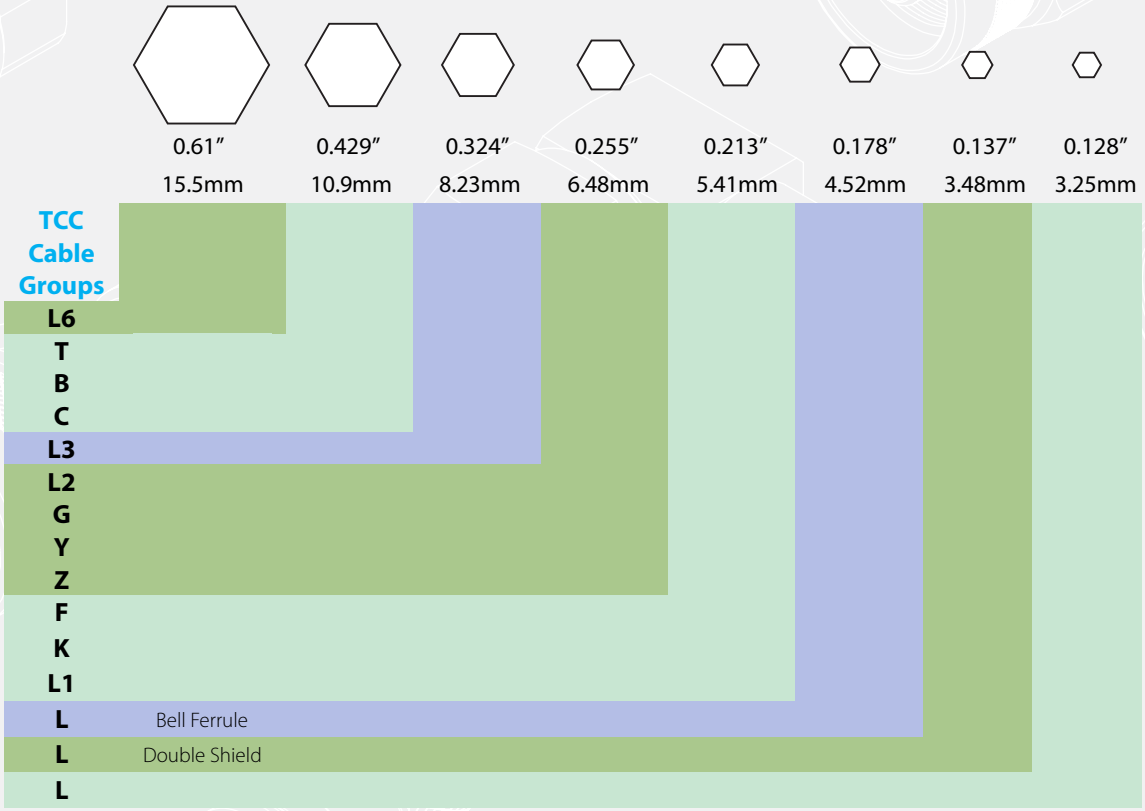
Special Feature and revison level
RP = Reverse Polarity
H = Hex Shell
E = Solderless
HK = Hex/Knurl
R = Reverse Thread
EH = Solderless, Hex

Connetor Insulation
D = Delrin
T = Teflon
B = Bakelite
ABS = ABS
PBT = PBT
PP = Polypropylene

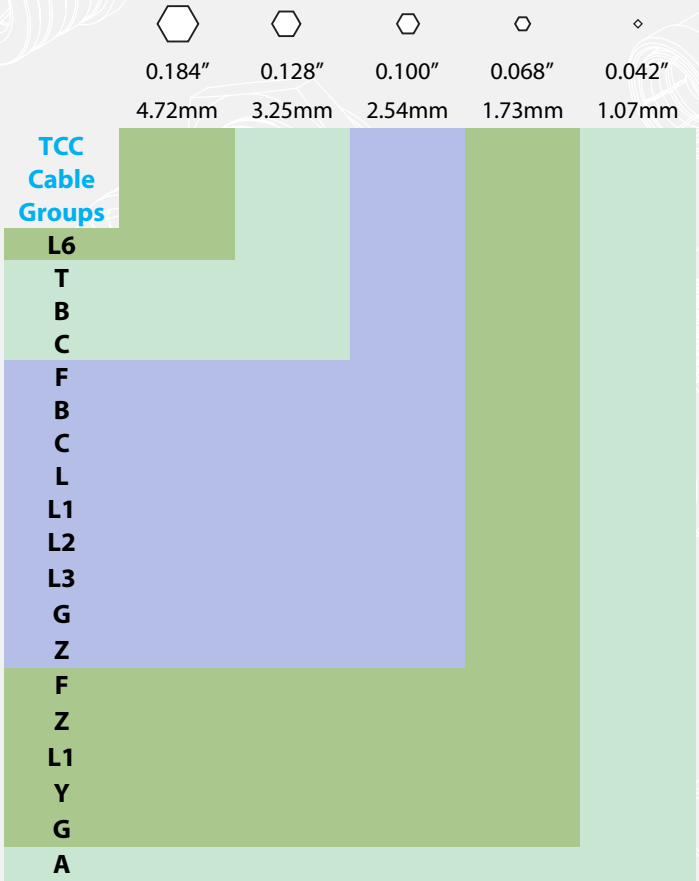
Contact Plating
G = Gold
S = Silver
N = Nickel
A = Tri-Metal
T = Tin

Connetor Body Plating
G = Gold
N = Nickel
S = Silver
BC = Black Chrome
BN = Black Nickel
A = Tri-Metal

RF CONNECTOR FERRULE CRIMP DIE SIZE GUIDE



RF CONNECTOR PIN CRIMP DIE SIZE GUIDE



AUTOMOTIVE CONNECTOR ORDERING GUIDE

3	6	H	-	0	1	L	-	1	2	-	A	-	T	G	N	-	TR

FAKRA

HSD

Style
01 = Cable Mount Straight Jack Crimp
02 = Cable Mount Straight Plug Crimp
03 = Cable Mount R/A Jack Crimp
06 = PCB Mount Straight Plug
07 = PCB Mount R/A Jack
08 = PCB mount R/A Plug
16 = Cable Mount Straight Plug, Bulkhead
33 = Female-Female 44 = Male-Male
34 = Female-Male 43 = Male to Female

TCC Cabe Group
L = RG-174/188/316 *Cable Assembly Details
F = RG-58
L2 = LMR240
Blank = not for Cable Application

Special Feature and revison level
R = Rotary Housing
IP67 or IP68= Waterproof
13 = BNC Adapter
19 = SMA Adapter
23 = FME Adapter

Key Code (see Key Code Chart)

Connector Insulation
T = Teflon
L = LCP

Connector Pin Plating
G = Gold
S = Silver

Connector Body Plating
N = Nickel
S = Silver
A = Tri-Metal

Packaging
Blank = Individual pack
TR = Tape and Reel

RF and Microwave Glossary of Terms

1 mm Connector: An RF connector that can perform up to 110 GHz. It performs at the highest frequency when compared to other millimeter wave connectors on the market.

1.0-2.3 DIN Connector: A micro-miniature coaxial connector that is 40% smaller than the 1.6-5.6 connector, with transmission frequency up to 10 GHz and an impedance of 50 Ω

1.6-5.6 Connector: A coaxial connector which is usable for frequencies at max of 12GHz. They were designed to be stable, compact, and have high data rates.

1.85 mm and 2.4 mm Connector: Both 1.85 mm and 2.4 mm connectors are physically compatible and require 5/16" wrench. They will not thread onto SMA, 3.5 or 2.92 mm connectors, and are commonly known as "V" connectors.

2.92mm Connector: Both 2.92mm and 3.5mm connector styles mate with SMA connectors, and with each other. These connectors offer higher maximum frequencies than SMA connectors. 2.92mm connectors usually work up to 46 GHz.

3.5mm Connector: Both 3.5mm and 2.92mm connector styles mate with SMA connectors, and with each other. These connectors offer higher maximum frequencies than SMA connectors 3.5mm connectors usually work up to 34 GHz.

4.1-9.5 Connector: 4.1-9.5 connectors are especially rugged and weatherproof due to their screw-lock mechanism. They are generally operable up to 10 GHz and offer low reflection ratios and low PIM performance.

7/16 Connector: A coaxial cable that works with medium/high power low transmission up to 8.3GHz that provides little attenuation. Usable in more harsh conditions (such as in the presence of moisture).

Adapters: Connectors that allow the connection between two cables whose male-female types do not necessarily match. Adapters exist in male to male (a barrel), female to female (a bullet), and male to female (a connector saver) connectors.

Amplifier: A device whose purpose is to take an input signal and increase its amplitude by a certain amount.

Amplitude Balance: The maximum peak-to-peak amplitude difference (in dB) between the output ports of a power divider or hybrid coupler over the specified frequency range.

Antenna: A device which interprets electrical signals/radio waves and transforms it to the other form (signal to waves, waves to signal).

Analog: A continuously varying signal (such as sound waves). The bandwidth and frequency of an analog signal is measured in Hz.

Attenuation: The loss of amplitude of a signal as it passes through a medium.

Attenuation Accuracy: The amount of variation in magnitude from the nominal value across the entire frequency band.

Attenuator: A passive device or network that absorbs part of the input signal and transmits the remainder with minimal distortion. Attenuators are used to extend the dynamic range of devices such as power meters and amplifiers, reduce signal levels to detectors, match circuits and are used daily in lab applications to aid in product design. Attenuators are also used to balance out transmission lines that otherwise would have unequal signal levels.

Bandwidth: The width of the frequencies between the two points where half the power of the signal is lost.

Base Station: A fixed transmitter/receiver with which a mobile radio transceiver establishes a connection link to gain access to the public-switched telephone network.

Bias Tees: A passive device used in applications to inject/remove DC voltages in RF circuits without affecting the RF signal through the main transmission path. Ideal for remote powering of bi-directional amplifiers (BDAs), repeaters and tower top amplifiers (TTAs) by BTS control modules.

Bluetooth: Uses radio waves of short wavelength in the ISM band from 2.4 to 2.485 GHz in order to send and/or receive data over short distances. Commonly used in personal electronic devices and in-home networks.

BMA Connector: Blind-Mate A connector used in microwave applications to 18 GHz - 26.5 GHz . BMAs utilize a slide-on interface and are designed to allow minimal radial and axial misalignment.

BNC Connector (50 Ω): This is a type of coaxial connector that has a two stud bayonet coupling mechanism, and is used for telecom and data system applications that perform up to 4 GHz (maximum 10 GHz). BNC connectors make fast and easy connections, and are very reliable.

BNC Connector (75 Ω): A coaxial connector with a Bayonet fastening mechanism.

BNO Connector : A connector appropriate for shielded twin-axial cables. The connector uses a bayonet coupling system.

Bulkhead Connector: Commonly used to refer to the connector mounting method. Bulkhead connectors are made to be inserted either from the front side or rear (component) side of a panel.

Cable: A material capable of passing some signal usually surrounded by strengthening strands and a protective jacket.

Cable Assembly: The cable itself along with the related hardware.

Capacitance: The primary electrical property of capacitor, measured in Farads. It is a measure of energy storage.

Circulator: A three-port ferromagnetic passive device used to control the direction of signal flow in an RF circuit.

Coaxial: A transmission line in which one conductor completely surrounds the other, the two being coaxial and separated by a continuous dielectric such as air or PTFE.

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Coaxial Connector: This type of connector provides a connection between two lines that not only have the same characteristic impedance, but also are as reliable, reflection-free, and uniform as possible. It has good electrical transmission characteristics, offers a insensitivity of a high degree toward electromagnetic interference, and is simple to connect and disconnect. The characteristic impedance of the different cables can be well matched to the characteristic impedance of the coaxial connector.

Conductivity: How well a material can conduct current. It is the inverse of resistance and has units of 1/Ω

Conductors: A conductor is a material that, simply put, conducts electricity and allows current to flow. Technically speaking, the definition of a conductor dictates that the material be between 10^6 and 10^4 Ohm-cm. Outside of that range lie superconductors, semiconductors, and insulators.

Connector Gender: The gender of a connector can be male or female. Male connectors have a protruding connection, while the female connector has a crevice where the male connector can sit. There do exists some "sexless" connectors when can connect to any other sexless connector of the same type.

Connector, Elbow: A connector that is bent so that it can connect two components that are not parallel to each other. These connectors exist in right angle connectors and swept connectors which are better at high frequencies than angle connectors.

Connector, Push-On: Connectors with a simple "push-on" mechanism. May be used when there are not threads on the components or simply for ease of use.

Connector, Reverse Polarity: For a connector to be considered "reverse polarity," its inner conductor's gender must be the opposite of the outer conductor or sheath. For example, a male reverse-polarity connector has a female inner conductor contact.

Contact: The part of the connector that physically touches the other connector through which a signal is passed.

Contact Durability: A number defining the expected number of connections that a connector can withstand before performance dips below a certain standard.

Contact Engaging & Separating Force: The amount of force required to remove and insert pin-and-socket contact connectors. The required specification will vary based on product application.
Contact Plating: A plating used on contacts that provides protection for the contact.

Contact Resistance: The electrical resistance of a connector under normal use, as measured at a particular testing current.

Contact Retention: The smallest axial force that a contact has to endure while it is connected in its appropriate position.

Coverage: A percentage which indicates how much the shield or broad covers the component underneath.

Crimp: To deform a connector ferrule around a cable to make an electrical connection.

Crimping Dies: The part of a crimping tool that makes contact with the terminal.

Crimping Termination: A connection that is made by mechanically crimping a metal sleeve with crimp dies, presses, or pliers, in order to secure in to a conductor.

Crimping Tool: A hand-held tool used to crimp, but not sever, certain electrical components such as contacts, ferrules, or terminals. Crimping tools are most commonly used to secure connectors to a coaxial cable.

Cutoff Frequency: The largest frequency at which a signals is not attenuated much. Any frequencies beyond the cutoff frequency become greatly reduced.

Cycle: One complete sequence of periodically occurring values, measured from a relative zero to some maximum value and back.

CW – (Continuous Wave): Signal of constant amplitude. Used to differentiate between the performance of a microwave component for continuous power level vs. pulsed signals.

dB – (Decibel): A unit of gain equal to ten times the common logarithm of the ratio of two power levels or 20 times the common logarithm of the ratio between two voltages.

dBc: Decibel related to the signal of a carrier. Passive intermodulation distortion is typically stated in dBc which takes into consideration the 43 dBm carrier tones.

dBm: Decibels related to 1mW – the standard unit of power level used in the microwave industry. Example: 0 dBm = 1mw, +10 dBm = 10mw, +20dBm = 100mw, etc.

Dielectric: An insulating material is dielectric if it can transmit an electrical force. In coaxial, the dielectric changes the cable's impedance, capacitance, and other characteristics.

Dielectric Constant (Permittivity): A property that determines how a material is affected by an electric field.

Dielectric Loss: A loss in power due to heat dissipation in the dielectric material.

Dielectric Strength: The maximum voltage at which an insulating material can withstand before electrical breakdown.

Dielectric Withstanding Voltage (DWV): Also known as breakdown voltage, this is the potential at which dielectric material breakdown occurs.

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DC Block: An in-line device primarily used in applications to block DC voltages in RF circuits without affecting the RF signal through the main transmission path. The three basic types are: Inner – Blocks DC voltages on inner conductor only, Outer – Blocks DC voltages on outer conductor only, and Inner/Outer – Blocks DC voltages on both conductors

Directional Coupler: A passive device used for sampling incident and reflected microwave power conveniently and accurately with minimal disturbance to the transmission line. Some general applications for directional couplers include line monitoring, power measurements and load source isolators.

Directivity: A measurement of the desired signal strength to the undesired signal strength. Determined by taking the value of isolation and subtracting the specified coupling (including all variations). Directivity is a measure of how good the couplers performance is (similar to the Q factor of a coil).

DIN: The German standards organization. A type of electrical connector used for various applications.

DC – (Direct Current): Current traveling in one direction as opposed to alternating current which changes directions.

Distortion: The deviation from input of the output wave form. One example of this phenomenon is clipping.

Dynamic Range: A range for which if a given signal is in that an electrical component can amplify the signal without distortion.

Efficiency, Antenna: A measure of resistive loss in an antenna, calculated by dividing the actual emitted power from an antenna by its theoretical value.

EMC – (Electromagnetic Compatibility): The capability of a system to not be affected by electromagnetic interference.

EMI – (Electromagnetic Interference): Unintentional interfering signals generated within or external to electronic equipment. Typical sources could be power line transients and electromechanical switching equipment.

Electroplating: Process of placing metallic layers of varying thickness on a base metal to obtain some electrical property.

Elevation: The angle between +90 degrees (up) and -90 degrees (down), starting from 0 degrees horizontal. It is usually represented by the Greek letter theta (Θ).

FAKRA: (Fachkreis Automobil, originally a German standard, literally "Automobile Expert Group"). A connector embedded within a plastic housing which features multiple color codes for easy identification and unique keying to prevent mis-mating, FAKRA connectors are designed to perform to meet the particular mechanical and environmental requirements of the automotive industry. Standard uses for FAKRA connectors are coaxial connections on devices with external antennas; such applications include SDARS, Cellular, GPS Navigation, key-less entry and satellite radio.

F Connector: A type of coaxial connector with high electrical and mechanical stability, and is often used in satellite TV, MATV, and CATV equipment. It is very suitable for measurement applications that perform up to 4 GHz since it contains a screw-lock system.

Feed-through: A feed-through is a terminal block or connector which permits bussing and simple distribution of electrical circuits by using double-ended terminals. This term is also used to describe a bushing inside a wall or bulkhead that separates compartments at varying levels or pressure, that has terminations on each side.

Ferrule (Coaxial): A short, hollow metal tube generally used for joining or reinforcing two pieces of wire or cable or to make a termination on the end of a cable.

FME Connector: A connector designed specifically for use in cellular applications in vehicles, due to their compact size and convenient connection properties. They operate at frequencies up to 3 GHz.

Footprint: The layout of the circuits on a board which is used in order properly connect components.

Frequency: The number of cycles of a periodic activity per unit time. The typical measurement is Hz (Hertz), which is cycles per second.

FM – (Frequency Modulation): A method in which the amplitude of a signal remains the same while the frequency of the signal is modulated. Higher frequencies represent higher amplitudes in the original signal.

Frequency Range: The minimum and maximum frequencies between which the specified component will meet all guaranteed specification.

Frequency Sensitivity: The maximum peak-to-peak variation in coupling (in dB) of a directional or hybrid coupler over the specified frequency range. Also referred to as “flatness.”

Gain: Ratio between output and input power of an amplifier, antenna, or other device measured in decibels.

GHz - (Gigahertz): A unit of frequency measure equal to 1000 MHz (Megahertz) or a billion hertz.

GSM – (Global System for Mobile Communications): The standard that describes protocols for 2G cellular networks. This was created by the European Telecommunications Standards Institute (ETSI).

Ground: Voltages in a circuit are measured in relation to a reference point, called ground.

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Heat Shrink: A plastic tube that is typically made of polyolefin or nylon, that is used as a booting on a cable assembly. When heat is applied to the heat shrink material, it 'shrinks' in size to provide a snug jacket at the base of the coaxial connector and cable termination. Heat shrink provides added durability and ruggedness to the cable assembly.

Hermetic Seal: An airtight seal commonly found on critically sensitive electronic components. This seal protects against the flow of gasses, liquids and other foreign matter.

Hz – (Hertz): A frequency unit equal to one cycle per second. 1 Hz = 1/sec. The name Hertz comes from Heinrich Hertz, the German physicist Heinrich Rudolf Hertz, the first person to provide conclusive proof of the existence of electromagnetic waves. Hertz are commonly expressed in multiples: kilohertz (103 Hz, kHz), megahertz (106 Hz, MHz), gigahertz (109 Hz, GHz), and terahertz (1012 Hz, THz).

HN (High Voltage N) Connector: A high-voltage application version of the popular N connector. A high-strength dielectric is used, as well as structural properties that ensure the outer conductor connects before the inner connector.

Hybrid Coupler: A passive four-port device that is used either to equally split an input signal with a resultant 90° phase shift between output signals or to combine two signals while maintaining high isolation between them.

IEEE: An acronym for Institute of Electrical and Electronics Engineers. IEEE sets many of the standards in the fields of electronics.

IEEE 802.11: The set of standards used for the design and implementation of wireless LAN

Impedance: A ratio of the current and voltage phases of a component. Impedance changes with frequency. When selecting which type of connector to use, the connector's impedance must match the impedance of the system being used.

Impedance Matching: A condition in which the internal impedance of a source or the surge impedance of a transmission line is the same as the impedance of a component or circuit, which gives minimum reflection and distortion, as well as maximum energy transfer from the source to the load.

Insertion Loss: Insertion loss is the loss of power caused by having a switch located between two connectors in the transmission. It is measured in decibels (dB). All RF/Microwave devices have insertion loss > 0.

Insulation: Material used to prevent or impede the flow of current, also known as dielectric in certain applications.

Insulation Resistance: The electrical resistance of a material which insulates in specific conditions between any pair of conductors, contacts, or grounding device in different combinations.

Insulators: Materials with very high resistance, insulators includes glass, plastic, rubber etc…

Interconnection: A connection between two components which joins and completes electric circuits.

Interface: A multiple-contact connector has two surfaces on the contact side of both of its halves, which face each other during the assembly of the connector. These two surfaces are called the interface.

Interference: The process in which the amplitudes of multiple waves are systematically weakened and reinforced. Also, the process in which one wave is divided into two or more waves, then joined again back into a single wave.

Intermediate Frequency: The frequency in which a carrier frequency is converted to during the process of transmission.

ISO: Known as the International Standards Organization. This organization develops standardized methodologies which are used worldwide.

ISO/TS 16949: A requirement for doing business internationally in the automotive sector. TS 16949 is the globally recognized quality management standard for the automotive industry. It brings together standards from across Europe and the US and provides a framework for achieving best practice with regards to the design and manufacture of products for the automotive supply chain. The standard has been developed by the International Automotive Task Force (IATF) and brings together common processes from across the industry sector. IATF comprises of nine member vehicle manufacturers - Ford, GM, Chrysler, BMW, VW, Daimler, Renault, PSA Peugeot Citroen and Fiat - along with national automotive trade organizations from USA, UK, France, Germany and Italy.

Impedance: Resistance to alternating current. Most RF and microwave systems are designed to operate with a characteristic impedance of 50 Ω.

Input VSWR: Minimum voltage standing wave ratio of a power divider at the input (sum) port over the specified frequency range with all other ports terminated in 50 Ω loads.

Insertion Loss: The change in load power due to the insertion of a particular device into a transmission system.

IP – (Ingress Protection): The IP Code (or International Protection Rating, sometimes also interpreted as Ingress Protection Rating*) consists of the letters IP followed by two digits and an optional letter. As defined in international standard IEC 60529, it classifies the degrees of protection provided against the intrusion of solid objects (including body parts like hands and fingers), dust, accidental contact, and water in electrical enclosures. The standard aims to provide users more detailed information than

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vague marketing terms such as waterproof. The digits (characteristic numerals) indicate conformity with the conditions. For example, an electrical socket rated IP22 is protected against insertion of fingers and will not be damaged or become unsafe during a specified test in which it is exposed to vertically or nearly vertically dripping water. IP22 or 2X are typical minimum requirements for the design of electrical accessories for indoor use.

Isolation: A unit of measure (in dB) that states the separation of signal levels on adjacent ports of a device. The greater the isolation value, less interference from a signal on one port is present at the other.

Isolator: A two-port ferromagnetic passive device which is used to control the direction of signal flow and utilizes an internal resistor. Typically used to protect other RF components from excessive signal reflection.

Jacket: A protective cover present on the outside of a cable. The jacket should be insulating if insulation does not already exist.

Land mobile radio (LMR): Vehicle mounted or human-portable wireless communication systems for land transportation.

MCX Connector: Micro-miniature Coaxial Connectors are made to be very reliable, easy to mount, and very small, containing a snap-on connecting system and used for frequencies up to 6 GHz.

Mega: International System (SI) of Units a prefix that means one million (1×10^6). Its abbreviation is M. 1 MHz = 1×10^6 Hz.

MHz – (Megahertz): Equal to 1 million Hz. Uses the International System (SI) of Units Prefix Mega, meaning 10^6.

Micro: The International System (SI) of Units prefix meaning 10^{-6}. Abbreviated by the Greek letter "mu" (μ).

Micrometer: A micrometer (μm) is a unit of length in the International (SI) system. 1 μm = 1×10^{-6} meters.

Microwave: A section of the electromagnetic spectrum extending between 1 and 300 GHz. The microwave spectrum is between the RF and infrared spectrums, and is used in many applications, including communications.

MIL: An abbreviation for the word "military." Often appears as "MIL-SPEC," implying that a part meets military specifications.

Milli: Milli (m) is a prefix in the International System (SI) of Units, which means one thousandth (1×10^{-3}). For example, 1 mm = 1×10^{-3} m.

Mini SMP Connector: The smallest connector on the market, with operating frequencies up to 65 GHz and an impedance of 50 Ω.

Mini UHF Connector: A type of miniature coaxial connector with an impedance of 50Ω and improved electrical performance compared to normal UHF series connectors. It is fitted with notched edges for adjustment and the typical UHF screw-locking system. Also, this connector has a high vibration security and torsional protection, which are provided by lugs located on the plug, corresponding to the notched edges on the jack. Mini UHF connectors are commonly used in mobile devices that perform up to 2.5 GHz.

MMCX Connector: Stands for Micro Miniature Coaxial connector which have snap on connection and can have frequencies from DC up to 6GHz.

MHz - (Megahertz): A unit of frequency measure equal to 1000 kHz (Kilohertz) or a million hertz.

Microstrip – (Microstripline): A transmission line consisting of a metalized strip and solid ground plane metallization separated by a thin, solid dielectric. Microstrip is a popular material above 400 MHz and below 6 GHz because it permits accurate fabrication of transmission lines on ceramic or PC board substrates. Higher frequencies or broadband devices tend to favor stripline technology.

Mobile Network Technology: The G in 2G, 3G, 4G & 5G stands for Generation, and they refer 2nd, 3rd, 4th & 5th generation of wireless technology. The newer generation is faster, more secure and more reliable. 1G was offered in analog technology (AMPS), and since 2G signals are transmitted in digital format in GSM and CDMA technologies. 1G – The analog 1G offered simple telephony service without data. 2G – Delivered digital signal and offered up to 250Kbps speed. Supports voice, text and data services. 3G – At least 200Kbps up to 3Mbps speed. 4G – 4G delivers up to 100Mbps for mobile access, and up to 1Gbps for wireless access. Most wireless carriers offering HSPA (High Speed Packet Access) at up to 6Mbps are claiming that they offer 4G network. 4G LTE – LTE (Long Term Evolution) is one of the two standards offered within 4G, and WiMax being the second one. The specification calls for downlink speed of up to 300Mbps and uplink speed of up to 75Mbps. 5G is the ITU IMT-2020 standard provides for speeds up to 20 gigabits per second and has only been demonstrated with millimeter waves of 15 gigahertz and higher frequency. The more recent 3GPP standard includes any network using the NR New Radio software. 5G New Radio can include lower frequencies, from 600 MHz to 6 GHz. However, the speeds in these lower frequencies are only modestly higher than new 4G systems, estimated at 15% to 50% faster. At least at the lower frequencies, "5G is evolutionary".

MTBF – (Mean Time Between Failure): The mean (average) time between failures of a component and is often attributed to the "useful life" of the materials used to assemble the device. MTBF assumes that the component can be "renewed" or fixed after each failure and returned to service immediately after failure.

N Type (50Ω) Connector: Coaxial connectors capable of frequencies up to 12 GHz. They have screw locking system and are reliable. The coupling shell has a 5⁄8-inch 24 tpi UNEF standard thread.

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Nanometer: A length equal to one billionth of a meter.

Noise: Random fluctuations of electrical signals caused by natural disturbances or circuit components.

Ohm (symbol: Ω). Ohm is the standard unit of electrical resistance in the International System of Units (SI). Ohms are also used, when multiplied by imaginary numbers, to denote reactance in alternating-current (AC) and radio-frequency (RF) applications.

Omnidirectional Antenna: Ideally, it is an antenna that is capable of radiating in all directions on the horizontal plane.

Output VSWR: Minimum voltage standing wave ratio of a power divider at any output port over the specified frequency range with all other ports terminated in 50 Ω loads.

PIM – (Passive Intermodulation): Occurs in passive devices such as cables or antennas that are subjected to two or more high power tones. PIM is the result of multiple tones mixing. The higher the signal amplitudes, the more pronounced the effect of PIM. PIM is also a result of a nonlinear response from a passive device caused by inconsistencies or impurities in the materials or connections. This is seen when there are two or more signals in the device.

Phase: In electronic signals, phase is defined as the position of a point in time on a waveform cycle. A complete cycle is defined as 360 degrees of phase.

Pin Contact: A type of male contact designed to mate with a socket or female contact.

Polarization: A property of electromagnetic waves which describes its orientation in space. Polarization is dependent on the type of wave, the type of source, and the source's orientation.

Prototype: A pre-production model of a product that exhibits full or partial functionality of the final product.

Passivation: The formation of an insulated layer directly over a metal to protect the surface from contaminants, moisture or particles.

Phase Balance: The maximum peak-to-peak phase difference (in degrees) between the output ports of a power divider over the specified frequency range.

PIM (Passive Intermodulation): Passive Intermodulation (PIM) occurs when two or more signals are present in a passive device (cable, connector, coupler, etc.) that exhibits a nonlinear response. The nonlinearity is typically caused by dissimilar metals or dirty/loose interconnects. Nonlinearity is typically not troublesome at low input signal levels, but if PIM is generated from a high power transmitter path to an adjacent receiver channel, desensitization will occur. A common PIM specification is typically -110 dBc or greater.

Power (Average): The maximum amount of mean (average) power of a modulated/pulsed signal a given component can dissipate at ambient temperature without degradation in performance.

Power (Peak): Instantaneous power a given component can dissipate for a percentage of the duty cycle (typically 2%) without degradation in performance.

PTFE (PolyTetraFluoroEthylene): PTFE has a stable and low dielectric constant and loss factor over a broad frequency and temperature range. Therefore, it is used as an insulator in microwave and RF coaxial connectors. Used as an insulator in RF and microwave coaxial connectors because of its low & stable dielectric constant and loss factor over a wide temperature and frequency range. Teflon is PTFE name brand by DuPont.

QMA Connector: A QMA connector is based on the dimensions of an SMA connector, however, it contains a snap-lock mechanism rather than a threaded coupling mechanism. It has frequency range DC - 18 GHz.

QN Connector: Connector with a snap-lock mating mechanism based on N dimension.

Quick-Lock: A connector that allows for quick connecting/ disconnecting.

QUICK-MATE: A type of adapter that is used for test applications since it enables quick connection and disconnection. It can be plugged without the need of a coupling nut.

Return Loss: When expressed in dB is the ratio of reflected power to incident power. It is a measure of the amount of reflected power on a transmission line when it is terminated or connected to any passive or active device. Once it is measured, it can be converted by equation to reflection coefficient which can be converted to VSWR.

RF – (Radio Frequency): Generally referring to any frequency at which the radiation of electromagnetic energy is possible typically above 50 MHz. Above 1000 MHz and up is considered microwave.

RF Leakage: The amount of energy which "leaks" or radiates from a connector and/or device. Typically tested at one frequency and expressed in dB. Very large negative values indicate that the device does not radiate much energy.

RoHS: (Restriction of Hazardous Substances) Directive adopted by the European Union in February 2003 with the specified limits for the following elements in the manufacture of various types of electronic and electrical equipment: Lead (Pb) < 0.1% , Mercury (Hg) < 0.1% , Cadmium (Cd) < 0.01% , Hexavalent Chromium (CrVI) < 0.1% , Polybrominated Biphenyls (PBB) < 0.1% , and Polybrominated Diphenyl Esters (PBDE) < 0.1% .

Radio Frequency (RF): Electromagnetic energy emitted between 50 MHz to 1 GHz

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Rated Voltage: Maximum voltage that can be constantly applied to a cable, connector, or any electrical component without destroying the component or causing any permanent alterations to its technical parameters.

Receptacle: A two-piece multiple contact connector's stationary half. It also commonly has socket contacts and is mounted on a panel.

Return Loss: The measure of the amount of reflected power when it is connected to any active or passive device or terminated on a transmission line. Return loss can be used to calculate VSWR and the Reflection Coefficient Expressed in dB.

RF Leakage: An amount of a signal that is lost in (or radiated by) a connector.

RF Shielding: The process of blocking an electromagnetic field with magnetic or conductive barriers in order to suppress it.

Root Mean Square (RMS): A mathematical operation done to a set of values. Specifically, it means "the square-root of the mean of the squared values." This has many applications in electrical engineering, including the calculation of average power.

Rubber Duck Antenna: An electrically short monopole antenna that is protected by a plastic or rubber jacket. Its function is similar to a base-loaded whip antenna.

Semi-Rigid: Cables whose outer insulators are relatively rigid, while the inner conductor are more flexible. This allows the cable to be more rigid but still be marginally flexible.

Sensitivity: The input power level which is required for the system to operate as intended.

SHF: Super High Frequency, Range: 3GHz to 30GHz

Shield: A conducting screen or housing that greatly reduces the effect of magnetic or electric fields coming from one side onto any circuits or devices on the other side. Cable shields can be taped, braided, or solid. Also, the metallic layer in a cable that prevents electromagnetic or electrostatic interference between the external fields and enclosed wires. This metallic layer is placed around a conductor, or group of conductors.

Shielding: A metallic coating used to prevent signal interference or current leakage in a circuit or coaxial cable.

Sine Wave: The classic example of a "wave." A sine wave is a function whose value oscillates about some zero value equally in both the positive and negative directions with respect to time.

SMA: (SubMiniature version A) connectors are semi-precision coaxial RF connectors has a minimal connector interface for coaxial cable with a screw-type coupling mechanism. The connector has a 50 Ω impedance. SMA is designed for use from DC to 18 GHz, but is most commonly used for hand-held radio and mobile telephone antennas, and more recently with WiFi antenna systems.

SMA Reverse Polarity: Sub-Miniature coaxial connector with a center contact with reversed gender. They perform up to 18 GHz and are often used for connections between W-LAN components, and have optimum electrical properties, such as low VSWR, high durability, long life, and high mechanical stability.

SMB (Subminiature B) Connector: A coaxial connector capable of frequencies from DC to 4GHz. Uses snap on coupling.

SMC Connector: A connector with a screw-on attachment, usable up to 10 GHz. These connectors can be coupled with a shared nut.

SMP Connector: A micro-miniature connector most commonly used in board-to-board applications. They operate up to 40 GHz and are available in a variety of mounting styles.

Snap N Connector: A quick-lock connector that can be mated with an N connector. It can be connected very quickly and in tight places without the need of any tools.

Soldering: The process of connecting many components by melting a metal which holds them together.

SSMC Connector: A micro miniature coaxial connector capable of 6GHz frequencies and has low voltage standing wave ratios. The connector uses screw on coupling.

Stripline: A transmission line consisting of a conductor above or between extended conducting surfaces. Higher frequencies or broadband devices tend to favor stripline technology.

Surface Mount Device (SMD): A passive or active device that is made to be soldered onto a PCB surface.

Surface Mount Technology (SMT): A way of mounting components to the surface of a printed surface board as opposed to plated through-holes.

TNC (50Ω) Connector: Coaxial connectors with electrical properties and dimensions similar to a BMC connector, but with a screw-on mating mechanism for quick connections. It generally usable up to 4 GHz.

TNC Reverse Polarity Connector: A type of threaded coaxial connector that contains the opposite sex center contact. This is known as reverse center contact. Optimum results are achieved up to 4 GHz, and is often used for connections between W-LAN components, much like SMA reverse polarity connectors.

Transceiver: A component capable of both transmitting and receiving signals.

Transducer: Converts energy from one form to another. For example, electrical energy (audio-frequency) into sound.

Transformer: Used to achieve maximum power transfer by matching impedance, as well as for separating DC from two

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circuits while keeping AC continuous, and voltage step-down or step-up. These processes take place in low-power electronic circuits.

Termination (RF Loads): Used at the end of a transmission line designed to absorb RF power with very little reflection, effectively terminating the line or port in its characteristic impedance. Terminations are used in a wide variety of measurement systems; any port of a multi-port microwave device that is not involved in the measurement should be terminated in its characteristic impedance in order to ensure an accurate measurement.

Temperature: The minimum and maximum ambient temperatures a given component can operate at and still meet all guaranteed specifications unless otherwise noted.

Torque: Recommended mating torque for industry standard connectors: SMA - 7 to 10 in-lbs, Type-N – 12 to 15 in-lbs, TNC – 12 to 15 in-lbs, 7/16 DIN – 220 to 300 in-lbs, etc.

Transmission Line: The conductive connections between circuit elements which carry signal power. Wire, coaxial cable, microstrip and stripline traces and waveguide are common examples.

Triaxial: A transmission line, often referred to as triax for short, is a type of electrical cable similar to coaxial cable, but with the addition of an extra layer of insulation and a second conducting sheath. It provides greater bandwidth and rejection of interference than coax, but is more expensive

Tri-Metal (White Bronze, Tri-Alloy or Albaloy: A plating finish comprised primarily of copper, tin and zinc which provides good electrical performance, but unlike silver, Tri-Metal is highly resistant to tarnish. Being non-magnetic, it also provides excellent passive intermodulation (PIM) performance comparable to silver.

Twinax BNC: Di-Pole symmetrical connectors with a bayonet coupling mechanism, applicable for shielded twin-wire cables with different characteristic impedance. It is not mateable with standard BNC connectors.

Twinaxial Cable: A twinaxial cable (Twinax) has two-pole symmetrical connectors which are polarized and locked. It also has a screw-locking system and gaskets that make it weatherproof. Twinaxial cable has impedances between 75 and 95 Ω.

UHF Connector: A World War II or earlier threaded RF connector design, from an era when "UHF" referred to frequencies over 30 MHz. Originally the connector was designed to carry signals at frequencies up to 300 MHz, but later measurements reveal limitations above 100 MHz. The coupling shell has a 5⁄8-inch-24 UNEF standard thread. The most popular cable plug and corresponding chassis-mount socket carry the old Signal Corps nomenclatures PL-259 (plug) and SO-239 (socket).

U.FL connectors: other versions IPEX, IPAX, IPX, AMC, MHF and UMCC is a miniature RF connector for high-frequency signals up to 6 GHz manufactured by Hirose Electric Group and others. U.FL connectors are commonly used in applications where space is of critical concern, most often Mini PCI cards for laptop computers. U.FL connectors are commonly used inside laptops and embedded systems to connect the Wi-Fi antenna to a Mini PCI card. Another common use is connecting GPS antennas. Female U.FL connectors are not designed with reconnection in mind, and they are only rated for a few reconnects (approximately 30 mating cycles) before replacement is needed. The female U.FL connectors are generally not sold separately, but rather as part of a pigtail with a high-quality 1.32mm doubly shielded cable, which allows for a low-loss connection. The male connectors are surface-mounted and soldered directly to the printed circuit board. They are designed to have a characteristic impedance of 50Ω. The mated connection is only 2.5mm high and takes as little as 9mm^2 of board space

Ultra Wideband (UWB): Useful at low energy levels and short ranges for high bandwidth communications. This technology uses a large frequency range.

Ultraviolet: A spectrum of light that is outside the visible spectrum that ranges from 20 to 380nm and is damaging to human eyes and skin.

Velocity of light: In a vacuum, the speed of light is approximately 300,000 km/s (186,000 miles/sec)

VHF: An acronym for Very High Frequency, which is from 30-300 MHz

Voltage Controlled Oscillator (VCO): An oscillator that can change the frequency by supplying a voltage to it.

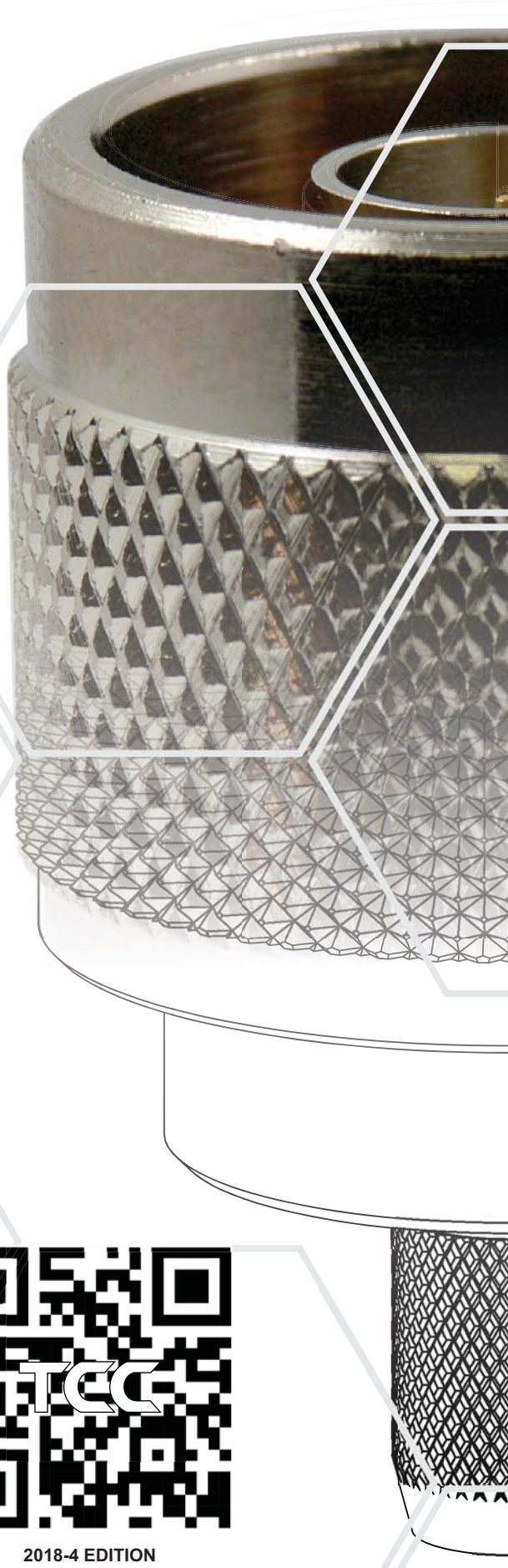
VSWR – (Voltage Standing Wave Ratio): The ratio of the incident signal compared to the reflected signal in a transmission line. VSWR cannot be directly measured, so a return loss measurement (expressed in dB) is taken of reflected power to incident power. Once it is measured, it can be converted by equation to reflection coefficient which can be converted to VSWR.

Waveguide: Hollow tubes with conductive walls which transmit signals along its axis. Waveguides can be rectangular, circular, or elliptical, and the operating frequencies are dependent on its shape and dimensions.

Wavelength: The distance from the beginning of an electromagnetic wave's complete cycle to the end of the cycle. The distance over which the wave's shape repeats.

Yagi: A directional, shortwave antenna containing a group of dipoles that are equally insulated and are parallel with a horizontal conductor. Yagi's contain one or two dipoles that are connected with the receiver.

ZigBee: A method of short range data transmission used to create personal-use networks for connecting devices.



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