

50 Ω μ WAVE/mmWAVE CABLES



STANDARD OFF-THE-SHELF ASSEMBLIES

TYPE		MWC-2550-01	MWC-2350-01	MWC-2350CU-01	MWC-19550-FCU-01	RG 405 (.086")	RG 402 (.141")	.047 Low-Loss Flexible	.085 Low-Loss Flexible	.086 Low-Loss Flexible	.178 Low-Loss Flexible	.277 Low-Loss Flexible
												
ELECTRICAL												
Max. Frequency (GHz)		40	35	50	45	20	20	65	50	65	27	18
Max. Insertion Loss (dB/m)	1 GHz	0.79	0.72	0.68	0.43	0.72	0.40	1.21	0.69	0.65	0.27	0.17
	26 GHz	3.80 @ 20 GHz	3.71 @ 20 GHz	4.27	2.78	4.26 @ 20 GHz	2.30 @ 20 GHz	7.43	4.28	3.90	1.23 @ 18 GHz	0.79 @ 18 GHz
	40 GHz	—	—	5.59	3.66	—	—	9.68	5.59	5.06	—	—
	50 GHz	—	—	6.46	—	—	—	11.14	6.47	5.81	—	—
Propagation Delay (ns/m)		4.76	4.72	4.76	4.12	4.79	4.79	4.76	4.75	4.20	4.17	4.02
Velocity of Propagation		70%			81%	70%	70%			80%		83%
Capacitance (pF/m)		96.80	95.45	97.80	82.39	104.97	98.07	95.00	88.2	83.37	82.00	
CONSTRUCTION												
Center Conductor		Solid Silver Plated Copper										
Dielectric		FEP			Foam Fluoro-polymer	PTFE		PFA	Solid PTFE	Foam Fluoro-polymer	PTFE Tape	
Shield		1) Ag Plated Cu 2) Ag Plated Cu		1) Ag Plated Cu 2) Cu Tape 3) Ag Plated Cu	1) Ag Plated Cu 2) Ag Plated Cu	Tinned Cu		1) Ag Plated Cu 2) Ag Plated Cu	Spiral Strip Ag Plated Cu	1) Ag Plated Cu 2) Ag Plated Cu	1) Flat Ag Plated Cu 2) Al Polyester 3) Round Ag Plated Cu	
Jacket		FEP				—	—	FEP				
MECHANICAL												
Operating Temp		-40° C to 200° C		-65° C to 125° C	-65° C to 150° C	-40° C to 125° C	-40° C to 125° C	-65° C to 150° C	-55° C to 200° C	-65° C to 150° C	-55° C to 200° C	
Min. Bend Radius		9.00 mm	12.00 mm	6.00 mm	12.50 mm	6.00 mm	10.90 mm	5.00 mm	13.20 mm	8.90 mm	24.80 mm	38.10 mm
Connector Options		SMA, SMP	3.50 mm	2.92 mm, 2.40 mm, SMPM	2.92 mm, 2.40 mm	SMA, SMP	SMA	1.35 mm, 1.85 mm, 2.40 mm, 2.92 mm, SMPM	2.92 mm, 2.40 mm	1.85 mm, 2.40 mm, 2.92 mm, SMPM	SMA, TNCA, N Type	SMA, TNCA, N Type
PART NUMBER												
Series		RF25S	RF23S	RF23C	RF120	RF405	RF402	RF047-A	RF085	RF086	RF180	RF280

*Shown at ~1/2 scale. ** Shown at 1/3 scale.

samtec.com/PrecisionRF

Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.

SMA TO 18 GHz

SMA Cable Assemblies

RF25S, RF402, RF405, RF180, RF280



VSWR

RF25S: 1.60 max.
RF402: 1.50 max.
RF405: 1.35 max.
RF180: 1.35 max.
RF280: 1.35 max.

Additional connector options available.
 Contact RFGroup@samtec.com

SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF25S = MWC-2550-01 microwave cable with 25 AWG solid FEP dielectric	-01SP1* = SMA Straight Plug		-“XXXX” = Overall Length in millimeters
RF402 = RG 402 (.141") 19 AWG semi-flexible microwave cable	-01RP1* = SMA Right-angle Plug (RF25S not available)		-0100 (100 mm) 3.94" minimum
RF405 = RG 405 (.086") 24 AWG semi-flexible microwave cable	-01BJ1* = SMA Bulkhead Jack (RF402 & RF405 not available)		
RF180 = (4.52 mm) .178" overshield DIA, 16 AWG microwave cable	*Remove last "1" from end connector when specifying RF180 & RF280.		
RF280 = (7 mm) .277" overshield DIA, 11 AWG microwave cable			

ALSO AVAILABLE

SMP = RF25S, RF405

TNCA, N Type = RF180

TNCA, N Type = RF280

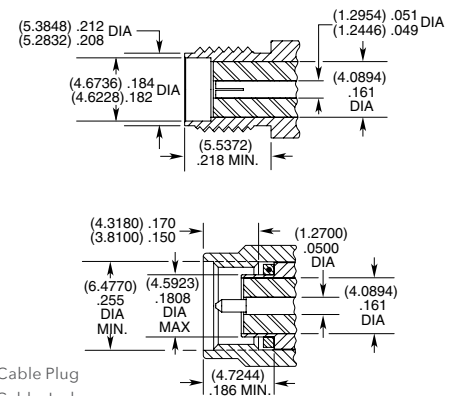
SMA Cable Connectors

PRF01



CONNECTORS FOR INDUSTRY STANDARD CABLES	
PRF01-P-C-EP-120B-SS	IW 1201, low loss flexible
PRF01-P-C-EP-120-SS	Harbour LL120, low loss flexible
PRF01-P-C-EP-142-SS	Harbour LL142, low loss flexible
PRF01-P-C-EP-190-SS	Semflex HP190, low loss flexible
PRF01-P-C-EP-335-SS	Harbour LL335, low loss flexible
PRF01-P-C-EP-290-SS	Semflex LA290, low loss flexible
PRF01-P-C-EP-142A-SS	Harbour SB142, low loss flexible
PRF01-P-C-EP-142-RS	Harbour LL142, low loss flexible
PRF01-P-C-EP-190-RS	Semflex HP190, low loss flexible
PRF01-J-C-EP-142-SS	Harbour LL142, low loss flexible
PRF01-P-C-EP-141A-SS	Harbour SS402, flexible alternative to RG 402
PRF01-P-C-EP-160-RS	Semflex HP160, low loss flexible
PRF01-P-C-EP-305-SS	Semflex HP305, low loss flexible
PRF01-P-C-EP-335A-SS	Harbour LL335i, low loss flexible
PRF01-P-C-EE-402-SD	RG 402, .141, semi-rigid
PRF01-P-C-EP-150-SS	Dynawave DF150, low loss flexible
PRF01-J-C-EE-405-SD	RG 405, .085, semi-rigid
PRF01-P-C-EE-047D-SD	.047, semi-rigid
PRF01-J-C-EE-047D-4D	.047, semi-rigid
PRF01-J-C-EE-047D-SD	.047, semi-rigid
PRF01-P-C-EP-160-SS	Semflex HP160, low loss flexible
PRF01-P-C-EE-405-SD	RG 405, .085, semi-rigid
PRF01-P-C-EP-200-SS	Times Max Gain 200, low loss flexible

INTERFACE STANDARD



P-C = Cable Plug

J-C = Cable Jack

EE = Plating (50 μ" Gold center contact & outer contact)

EP = Plating (50 μ" Gold center contact, passivated outer contact)

SS = Straight, Solder Clamp

SD = Straight, Direct Solder

RS = Right-angle, Solder Clamp

4D = 4-hole flange, Direct Solder

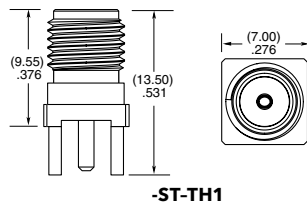
SMA Board Connectors

SMA-TH, SMA-SM, SMA-MT, SMA-EM

Cable Mates:
 RF25S, RF402, RF405, RF180, RF280



SMA	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-J = Jack	-P = PCB Mount	-H = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact	-ST = Straight	-TH1 = Through-hole
			-GF = 10 μ" (0.25 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (-SM1 only)	-RA = Right-angle	-SM1 = Surface Mount (-GF-RA only)
					-EM1 = Edge Mount (-ST only)
					-EM3 = Drop-in Edge Mount (-ST only)
					-MT1 = Mixed Technology (-ST only)



N TYPE TO 18 GHz

N Type Cable Assemblies

RF180, RF280



VSWR

RF180: 1.35 max.
RF280: 1.35 max.

SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF180 = (4.52 mm) .178" overshield DIA, 16 AWG microwave cable RF280 = (7 mm) .277" overshield DIA, 11 AWG microwave cable	-06SP = N Type Straight Plug -06RP = N Type Right-angle Plug -06BJ = N Type Straight Bulkhead Jack		-"XXXX" = Overall length in millimeters -0100 (100 mm) 3.94" minimum

ALSO AVAILABLE

SMA, TNCA = RF180

SMA, TNCA = RF280

PRELIMINARY

N Type Cable Connectors

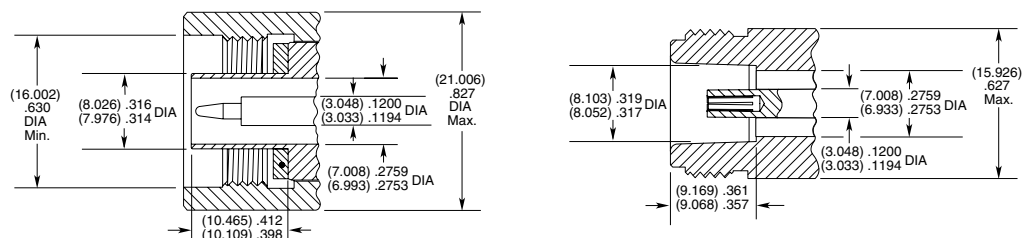
PRF06



CONNECTORS FOR INDUSTRY STANDARD CABLES	
PRF06-P-C-EP-142-SS	Harbour LL142, low loss flexible
PRF06-P-C-EP-190-SS	Semflex HP190, low loss flexible
PRF06-P-C-EP-335-SS	Harbour LL335, low loss flexible
PRF06-P-C-EP-290-SS	Semflex LA290, low loss flexible
PRF06-P-C-EP-142A-SS	Harbour SB142, low loss flexible
PRF06-P-C-EP-305-SS	Semflex HP305, low loss flexible
PRF06-P-C-EP-335-RS	Harbour LL335, low loss flexible
PRF06-J-C-EP-142-BS	Harbour LL142, low loss flexible
PRF06-J-C-EP-190-BS	Semflex HP190, low loss flexible
PRF06-P-C-EP-120A-SS	Semflex HP120, low loss flexible
PRF06-J-C-EP-402-4S	RG 402, .141, semi-rigid
PRF06-P-C-EP-142-RS	Harbour LL142, low loss flexible
PRF06-P-C-EP-190-RS	Semflex HP190, low loss flexible
PRF06-J-C-EP-290-BS	Semflex LA290, low loss flexible
PRF06-P-C-EP-141A-SS	Harbour SS402, flexible alternative to RG 402
PRF06-J-C-EP-335-BS	Harbour LL335, low loss flexible
PRF06-P-C-EP-335A-SS	Harbour LL335i, low loss flexible
PRF06-P-C-EP-290-RS	Semflex LA290, low loss flexible
PRF06-P-C-EP-300A-SS	Times Max Gain 300, low loss flexible
PRF06-P-C-EP-335A-RS	Harbour LL335i, low loss flexible
PRF06-P-C-EP-160B-SS	ATM CF-210, low loss flexible
PRF06-P-C-EP-270A-RS	Dynawave DF218, low loss flexible

P-C = Cable Plug
J-C = Cable Jack
EP = Plating (50 μ" Gold center contact, passivated outer contact)
SS = Straight, Solder Clamp
RS = Right-angle, Solder Clamp
BS = Bulkhead, Solder Clamp
4S = 4-hole Flange, Solder Clamp

INTERFACE STANDARD



LOW-FREQUENCY CABLES

STANDARD OFF-THE-SHELF ASSEMBLIES

TYPE		50 Ω CABLES						75 Ω CABLES						100 Ω CABLES
		RG 178	CTB-2650F-01	RG 174	RG 316	RG 316 DS	RG 58	RG 179	BELDEN 1855A	BELDEN 1694A	BELDEN 4855R	BELDEN 4694R	RG 6	TPS-28100-RF
ELECTRICAL														
Impedence	Ω	50 ± 2		50 ± 5	50 ± 2	50 ± 3		75 ± 3						100 ± 5
Insertion Loss (dB/m)	100 MHz	0.50	0.68	0.40	0.30	1.4 @ 2 GHz	0.20	0.30	0.12	0.07	0.12	0.06	0.07	-----
	1 GHz	1.70	2.37	1.40	1.25	1.6 @ 3 GHz	0.80	0.80	0.37	0.21	0.36	0.19	0.21	-----
	6 GHz	5.90	6.53	4.40	4.25	2.2 @ 5 GHz	5.40	3.60	0.97	0.59	0.91	0.51	0.59	-----
Propagation Delay	nS/m	4.83	4.17	5.06	4.83	-----	5.05	4.83	4.12	4.06		3.92	4.03	-----
Current Rating	Amps	3	3	5	5	-----	-----	3	5	-----	4.70	16	-----	-----
Capacitance	pF/m	96	85.6	101	96	95.8	102	64	55.7	53.14	53.40	52.20	53.14	38
CONSTRUCTION														
Center Conductor	Material	Silver Plated Copper Clad Steel	Silver Plated Copper	Bare Copper	Silver and Copper Plated Steel	Silver Plated Copper Clad Steel	Tinned Copper	Silver Plated Copper	Bare Copper		Silver Plated Copper		Bare Copper	Silver Plated Copper
	AWG	30	26	26	26	26	20	30	23	18	23	18	18	28
Dielectric	Material	PTFE	Foamed FEP	KLPE	PTFE	FEP	Solid Polyethylene	PTFE	FHDPE	FHDPE	PE (Foam)		FHDPE	FEP
Shield	Material	Silver Plated Copper		Tinned Copper	Silver Plated Copper		Tinned Copper	Silver Plated Copper	1. Al Foil-Polyester Tape-Al Foil 2. Tinned Copper	1. Bonded Al Foil 2. Al Wire	1. Al Foil-Polyester Tape-Al Foil 2. Tinned Copper		Silver Plated Copper	
Jacket	Material	FEP		PVC	FEP		PVC	FEP	PVC	PVC	PVC		PVC	PVC
	Temp Rating	-50 °C to +165 °C	-40 °C to +200 °C	-20 °C to +80 °C	-55 °C to +165 °C	-----	-50 °C to +90 °C	-50 °C to +165 °C	-30 °C to +75 °C	-30 °C to +75 °C	-30 °C to +75 °C	-20 °C to +75 °C	-30 °C to +75 °C	-20 °C to +105 °C
MECHANICAL														
Bend Radius	Min	10.2 mm	3.175 mm	25.4 mm	12.7 mm	12.8 mm	48.3 mm	10.2 mm	38.1 mm	69.85 mm	41 mm	70 mm	69.85 mm	19.05 mm
Connector Options		MMCX, MCX, SMA, SMB, BNC, TNC, N Type	IsoRate®	MMCX, MMCXV, MCX, SMA, SMB, BNC, TNC, N Type, Ganged		MMCX, MCX, SMA, BNC, TNC	SMA, TNC, N Type	MCX, MMCX7, SMB, BNC, DIN 1.0/2.3, Ganged	HD-BNC™, DIN 1.0/2.3	BNC, HD-BNC™, DIN 1.0/2.3	HD-BNC™, DIN 1.0/2.3	BNC, HD-BNC™, DIN 1.0/2.3		CJT
PART NUMBER														
Series		RF178	IJ5C	RF174	RF316, IJ5C, IJ5H, GRF1-C, GRF1H-C	RS316	RF058	RF179, GRF7-C, GRF7H-C	RFB8T	RFB6T	RFC8T	RFC6T	RFA6T	C28S

TNCA TO 18 GHz

TNCA Cable Assemblies RF180, RF280



VSWR

RF180: 1.35 max.
RF280: 1.35 max.

SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
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RF180
= (4.52 mm) .178" overshield DIA,
16 AWG microwave cable

RF280
= (7 mm) .277" overshield DIA,
11 AWG microwave cable

-04SP
= TNCA Straight Plug

-04RP
= TNCA Right-angle Plug

-04BJ
= TNCA Straight Bulkhead Jack

-"XXXX"
= Overall length in
millimeters

-0100 (100 mm) 3.94"
minimum

ALSO AVAILABLE

SMA, N Type = RF180

SMA, N Type = RF280

PRELIMINARY

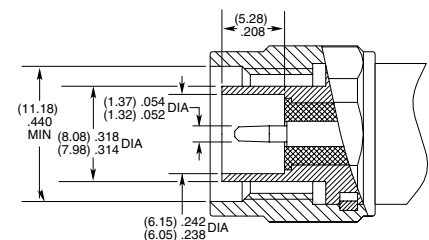
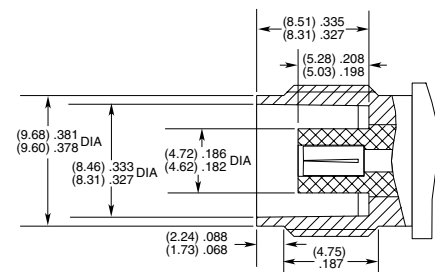
TNCA Cable Connectors PRF04



CONNECTORS FOR INDUSTRY STANDARD CABLES	
PRF04-P-C-EP-142-RS	Harbour LL142, low loss flexible
PRF04-J-C-EP-142-BS	Harbour LL142, low loss flexible
PRF04-P-C-EP-142-SS	Harbour LL142, low loss flexible
PRF04-P-C-EP-335-SS	Harbour LL335, low loss flexible
PRF04-P-C-EP-290-SS	Semflex LA290, low loss flexible
PRF04-J-C-EP-190-BS	Semflex HP190, low loss flexible
PRF04-P-C-EP-190-RS	Semflex HP190, low loss flexible
PRF04-P-C-EP-190-SS	Semflex HP190, low loss flexible
PRF04-P-C-EP-335A-RS	Harbour LL335i, low loss flexible
PRF04-J-C-EP-335A-BS	Harbour LL335i, low loss flexible
PRF04-P-C-EP-300A-SS	Times Max Gain 300, low loss flexible
PRF04-P-C-EP-200-SS	Times Max Gain 200, low loss flexible

P-C = Cable Plug
J-C = Cable Jack
EP = Plating (50 μ" Gold center contact, passivated outer contact)
SS = Straight, Solder Clamp
RS = Right-angle, Solder Clamp
BS = Bulkhead, Solder Clamp

INTERFACE STANDARD



50 Ω SMA TO 6 GHz

SMA Cable Assemblies

RF174, RF178, RF316,
RS316, RF058



SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF174 = RG 174 Cable	-01SP1 = SMA Straight Plug		-“XXXX” = Overall Length in millimeters
RF178 = RG 178 Cable (-01BJ1 & -01BR1 only)	-01RP1 = SMA Right-angle Plug		-0100 (100 mm) 3.94" minimum
RF316 = RG 316 Cable, Single Braid Shield	-01BJ1 = SMA Straight Bulkhead Jack		
RS316 = RG 316 Cable, Double Shield (-01SP1 & -01BJ1 only)	-01SB1 = Straight Bulkhead Jack, Sealed		
RF058 = RG 58 Cable, (-01SP1, -01BJ1 & 01SB1 only)	-01SR1 = Straight Bulkhead Jack, Sealed, Reversed Polarity		
	-01BR1 = Straight Bulkhead Jack, Sealed, Reversed Polarity		
	-01PN1 = 4-Hole Panel Mount Jack		

ALSO AVAILABLE

50 Ω: MCX, MMCX, SMB, BNC, TNC,
N Type = RF174, RF178, RF316

50 Ω: MCX, MMCX, BNC, TNC = RS316

50 Ω: TNC = RF058

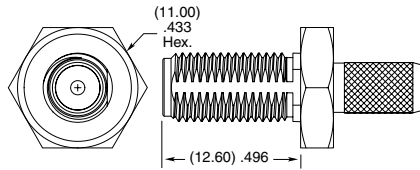
SMA Cable Connectors

SMA-CA



Supplied with pins, washers,
nuts and ferrules. See website
for dimensions.

SMA	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-J = Jack	-C = Cable -C4 = Cable 4-Mounting Screws (-PN1 only)	-H = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (N/A with -BH1S) -HF = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (-BH1S only)	-ST = Straight	-BH1 = Bulkhead RG 174 / 316 Cable -BH2 = Bulkhead RG 178 Cable -BR1 = Bulkhead RG 174 / 316, Reversed Polarity -BR2 = Bulkhead RG 178 Cable, Reversed Polarity
					-BH1S = Bulkhead RG 316 Cable, Double Shield -B10 = Bulkhead RG 58 Cable -PN1 = 4-Hole Panel Mount RG 174 / 316 Cable -S10 = Sealed Bulkhead RG 58 Cable



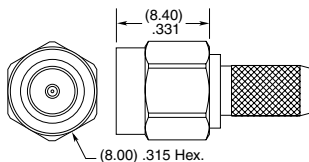
-S10, -B10



SMA Board Connectors

See page 145 for
Board Connectors

SMA	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-P = Plug	-C = Cable	-H = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (-CA1, -C10 only) -HF = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact (-CA1S only)	-ST = Straight -RA = Right-angle	-CA1 = RG 174 / 316 Cable -C10 = RG 58 Cable (-ST only) -CA1S = RG 316 Double Shielded Cable (-ST only)



-ST-C10

Supplied with pins, washers, nuts and ferrules.
See website for dimensions.

50 Ω MCX TO 6 GHz

MCX Cable Assemblies

RF174, RF178, RF316, RS316



SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF174 = RG 174 Cable	-02SJ1 = MCX Straight Jack		-“XXXX” = Overall Length in millimeters
RF178 = RG 178 Cable	-02RP1 = MCX Right-angle Plug (RS316 not available)		-0100 (100 mm) 3.94" minimum
RF316 = RG 316 Cable, Single Braid Shield	-02SP1 = MCX Straight Plug		
RS316 = RG 316 Cable, Double Shielded			

ALSO AVAILABLE

50 Ω: MMCX, SMA, SMB, BNC, TNC,

N Type = RF174, RF178, RF316

50 Ω: MMCX, SMA, BNC, TNC = RS316

MCX Cable Connectors

MCX-CA



Supplied with pins and ferrules.
See website for dimensions.

CONNECTORS FOR INDUSTRY STANDARD CABLES	
MCX-J-C-H-ST-CA1	RG 174/316 Cable
MCX-J-C-H-ST-CA2	RG 178 Cable
MCX-J-C-HF-ST-CA1S	RG 316 Double Shielded Cable
MCX-P-C-H-ST-CA1	RG 174/316 Cable
MCX-P-C-H-ST-CA2	RG 178 Cable
MCX-P-C-HF-ST-CA1S	RG 316 Double Shielded Cable
MCX-P-C-H-RA-CA1	RG 174/316 Cable
MCX-P-C-H-RA-CA2	RG 178 Cable

P-C = Cable Plug

J-C = Cable Jack

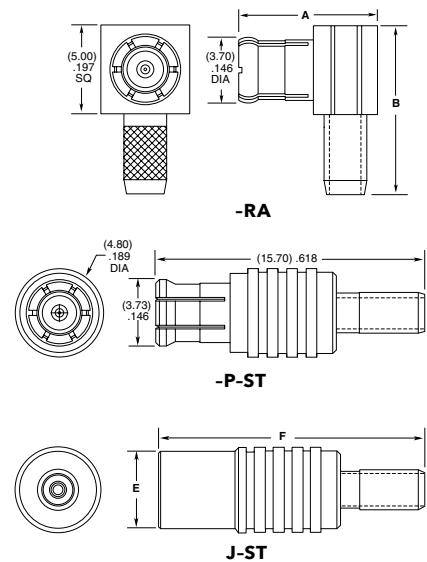
H or HF = Plating (30 μ" Gold center contact,
3 μ" Gold outer contact)

ST = Straight

RA = Right-angle

TYPE (-RA)	A	B
-P-CA1	(7.78) .306	(9.50) .374
-P-CA2	(8.58) .338	(10.00) .394

TYPE (-ST)	E	F
-J-CA1	(4.50) .177	(15.50) .610
-J-CA2	(4.78) .188	(15.00) .591
-J-CA1S	(4.50) .177	(15.50) .610



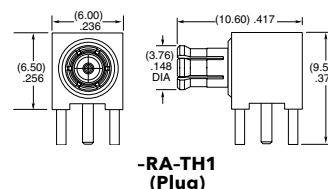
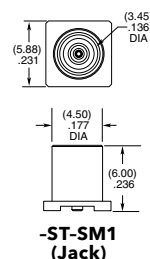
MCX Board Connectors

MCX-TH, MCX-SM, MCX-EM, MCX-MT

Cable Mates:
RF174, RF178, RF316, RS316, GRF1H-C, IJ5H



MCX	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-J = Jack	-P = PCB Mount	-H = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact	-ST = Straight	-TH1 = Through-hole (-ST plug not available)
	-P = Plug			-RA = Right-angle	-TH2 = Elevated Through-hole (-ST plug only)
					-SM1 = Surface Mount (Jack only)
					-EM1 = Edge Mount (-ST Jack only)
					-MT1 = Mixed Technology (-ST Jack only)



50 Ω MMCX TO 6 GHz

MMCX Cable Assemblies

RF174, RF178, RF316,
RS316



SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF174 = RG 174 Cable	-03SP1 = MMCX Straight Jack		-“XXXX” = Overall Length in millimeters
RF178 = RG 178 Cable (-03SP1 & -03RP1 only)	-03RP1 = MMCX Right-angle Plug		-0100 (100 mm) 3.94" minimum
RF316 = RG 316 Cable, Single Braid Shield	-V3SP1 = MMCXV Straight Plug, High Vibration		
RS316 = RG 316 Cable, Double Shielded (-03SP1 only)	-V3RP1 = MMCXV Right-angle Plug, High Vibration		
	-V3SJ1 = MMCXV Straight Jack, High Vibration		

ALSO AVAILABLE

50 Ω: MCX, SMA, SMB, BNC, TNC,
N Type = RF174, RF178, RF316
50 Ω: MCX, SMA, BNC, TNC = RS316

MMCX Cable Connectors

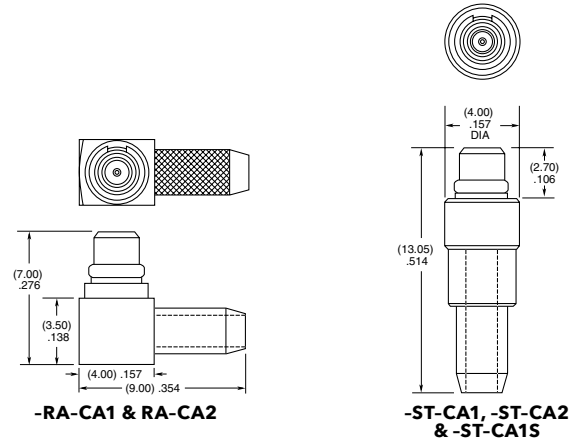
MMCX-CA



CONNECTORS FOR INDUSTRY STANDARD CABLES	
MMCX-P-C-H-ST-CA1	RG 174/316 Cable
MMCX-P-C-H-ST-CA2	RG 178 Cable
MMCX-P-C-HF-ST-CA1S	RG 316 Double Shielded Cable
MMCX-P-C-H-RA-CA1	RG 174/316 Cable
MMCX-P-C-H-RA-CA2	RG 178 Cable

P-C = Cable Plug
H or HF = Plating (30 μ" Gold center contact,
3 μ" Gold outer contact)
ST = Straight
RA = Right-angle

Supplied with pins and ferrules.
See website for dimensions.



-RA-CA1 & RA-CA2

-ST-CA1, -ST-CA2
& -ST-CA1S

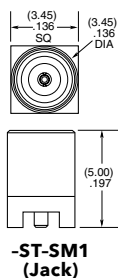
MMCX Board Connectors

MMCX-SM, MMCX-TH,
MMCX-MT, MMCX-EM

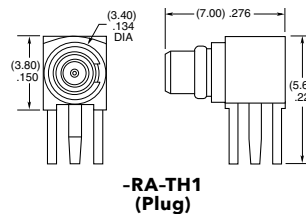
Cable Mates:
RF174, RF178, RF316, RS316,
GRF1H-C, IJ5H



MMCX	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-J = Jack	-P = PCB Mount	-H = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact	-ST = Straight -RA = Right-angle	-TH1 = Through-hole -MT1 = Mixed Technology (-ST only) -SM1 = Surface Mount (-RA plug not available) -EM1 = Edge Mount (-ST only)
	-P = Plug				



-ST-SM1
(Jack)



-RA-TH1
(Plug)

50 Ω TNC TO 6 GHz

TNC Cable Assemblies

RF174, RF178, RF316, RS316, RF058



SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF174 = RG 174 Cable	-05SP3 = TNC Straight Plug (RF058 not available)		-“XXXX” = Overall Length in millimeters
RF178 = RG 178 Cable	-05BJ3 = TNC Straight Bulkhead Jack (RS316 & RF058 not available)		-0100 (100 mm) 3.94” minimum
RF316 = RG 316 Cable, Single Braid Shield	-05SR3 = TNC Straight Plug, Reversed Polarity (RF058 only)		
RS316 = RG 316 Cable, Double Shielded			
RF058 = RG 58 Cable			
ALSO AVAILABLE			
50 Ω: MCX, MMCX, SMA, SMB, BNC,			
N Type = RF174, RF178, RF316			
50 Ω: MCX, MMCX, SMA, BNC = RS316			
50 Ω: SMA, N Type = RF058			

TNC Cable Connectors

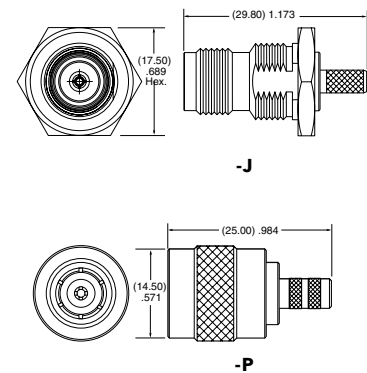
TNC-CA



Supplied with pins, washers, nuts and ferrules. See website for dimensions.

CONNECTORS FOR INDUSTRY STANDARD CABLES	
TNC-P-C-GN-ST-CA1	RG 174/316 Cable
TNC-P-C-GN-ST-CA2	RG 178 Cable
TNC-P-C-GN-SR-C10	RG 58 Cable
TNC-J-C-GN-ST-BH1	RG 174/316 Cable, Bulkhead
TNC-J-C-GN-ST-BH2	RG 178 Cable, Bulkhead

P-C = Cable Plug
J-C = Cable Jack
GN = Plating (10 μ" Gold on contact, Nickel on body)
ST = Straight
SR = Straight Reverse Polarity



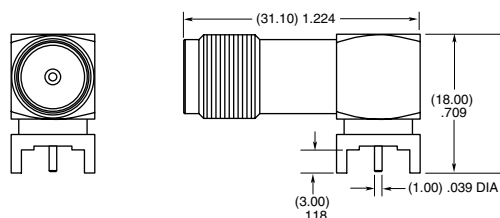
TNC Board Connectors

TNC-TH

Cable Mates:
RF174, RF178, RF316, RS316, RF058, GRF1H-C



TNC	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-J = Jack	-P = PCB Mount	-H = 30 μ" (0.76 μm) Gold center contact, Nickel on shell	-RA = Right-angle	-TH1 = Through-hole



50 Ω BNC TO 4 GHz

BNC Cable Assemblies RF174, RF178, RF316, RS316



SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF174 = RG 174 Cable	-04SP3 = BNC Straight Plug (RS316 not available)		-“XXXX” = Overall Length in millimeters
RF178 = RG 178 Cable	-04BJ2 = BNC Bulkhead Jack		-0100 (100 mm) 3.94" minimum
RF316 = RG 316 Cable, Single Braid Shield	ALSO AVAILABLE 50 Ω: MCX, MMCX, SMA, SMB, TNC, N Type = RF174, RF178, RF316 50 Ω: MCX, MMCX, SMA, TNC = RS 316		
RS316 = RG 316 Cable, Double Shielded			

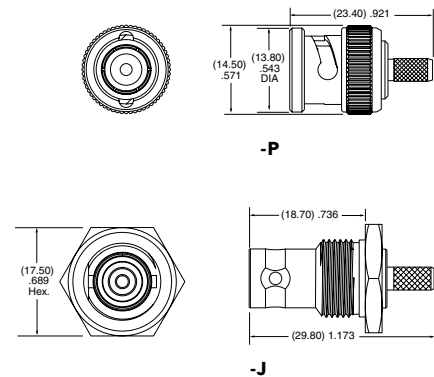
BNC Cable Connectors BNC5-CA



Supplied with pins, washers,
nuts, gaskets and ferrules.
See website for dimensions.

CONNECTORS FOR INDUSTRY STANDARD CABLES	
BNC5-P-C-GN-ST-CA1	RG 174/316 Cable
BNC5-P-C-GN-ST-CA2	RG 178 Cable
BNC5-J-C-GN-ST-BH1	RG 174/316 Cable, Bulkhead
BNC5-J-C-GN-ST-BH2	RG 178 Cable, Bulkhead
BNC5-J-C-GN-ST-BH1S	RG 316 Double Shielded Cable, Bulkhead

P-C = Cable Plug
J-C = Cable Jack
GN = Plating (10 μ" Gold on contact, Nickel on body)
ST = Straight



50 Ω SMB TO 4 GHz

SMB Cable Assemblies RF174, RF178, RF316



SERIES	END 1 CONNECTOR	END 2 CONNECTOR	OVERALL LENGTH
RF174 = RG 174 Cable	-07SP1 = SMB Straight Plug		-“XXXX” = Overall Length in millimeters
RF178 = RG 178 Cable	-07RP1 = SMB Right-angle Plug		-0100 (100 mm) 3.94” minimum
RF316 = RG 316 Cable, Single Braid Shield	-07BJ1 = SMB Bulkhead Jack		
	-07BJ2 = SMB Bulkhead Jack (RF178 only)		

ALSO AVAILABLE

50 Ω: MCX, MMCX, SMA, BNC, TNC,
N Type = RF174, RF178, RF316

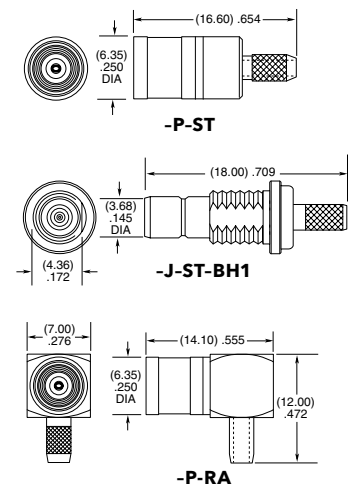
SMB Cable Connectors SMB5-CA



CONNECTORS FOR INDUSTRY STANDARD CABLES	
SMB5-P-C-H-ST-CA1	RG 174/316 Cable
SMB5-P-C-H-RA-CA1	RG 174/316 Cable
SMB5-J-C-H-ST-CA2	RG 178 Cable
SMB5-J-C-H-ST-BH1	RG 316 Cable, Bulkhead

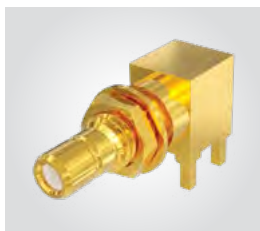
P-C = Cable Plug
J-C = Cable Jack
H = Plating (30 μ" Gold center contact,
3 μ" Gold on outer contact)
ST = Straight
RA = Right-angle

Supplied with pins, washers,
nuts and ferrules. See website
for dimensions.



SMB Board Connectors SMB5-TH

Cable Mates:
RF174, RF178, RF316,
GRF1H-C, IJ5H



SMB5	GENDER	TYPE	PLATING	ORIENTATION	TERMINATION
	-J = Jack	-P = PCB Mount	-H = 30 μ" (0.76 μm) Gold center contact, 3 μ" (0.08 μm) Gold outer contact	-RA = Right-angle	-TH1 = Through-hole

