



SMA COAXIAL CONNECTORS

The Connex SMA connectors are semi-precision, sub-miniature, high-frequency connectors which offer reliable broadband performance DC to 18GHz with low reflection and constant 50 ohm impedance.

The main features are high mechanical strength, high durability and low VSWR. Matured design principles, careful manufacturing at all stages and a thorough quality assurance organization are the bases for the well-known quality of Connex SMA connectors.

ELECTRICAL SPECIFICATIONS

Impedance	50 ohm	
Frequency range	*Semi-rigid cable for .141" or .085" O.D. copper jacket: 0–18 GHz *Flexible cable: 0–12.4 GHz	
Voltage rating	*RG–58, 141, 142, 223: 500v peak *RG–174, 188, 316: 375V peak	
Dielectric withstanding voltage	*.141" & RG–58 cable group: 1000V RMS * .085" & RG–316 cable group: 750V RMS	
VSWR—straight Connectors *f in GHz	*.141" semi-rigid cable group: 1.05 + .005f *RG–174 cable group: 1.15 + .02f	*RG–58 cable group: 1.15 + .01f *RG–178 cable group: 1.20 + .025f
Contact resistance	Center: 2.0 milliohms Body: 2.0 milliohms Braid to body: 0.5 milliohms	
Insulation resistance	5000 Megohms	
RF leakage	-90 db min. at 2–3 GHz	
Insertion loss	db max. = .06√freq. GHz.. Test frequency @6.0 GHz	

MILITARY SPECIFICATIONS
MIL–C–39012 & MIL–C–83517 SMA

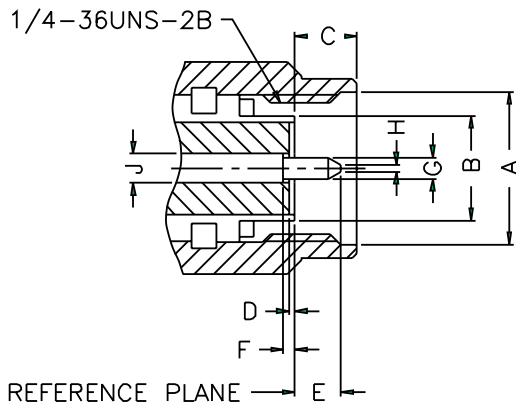
MATERIAL SPECIFICATIONS

PARTS NAME		MIL STANDARD	ECONOMIC TYPE
Body, coupling nut, other metal parts		Non-magnetic stainless steel per QQ–S–764 #303 finish: passivated	Brass per QQ–B–626 finish: nickel or gold per requirement
Contacts	Male	Brass per QQ–B–626	Brass per QQ–B–626
	Female	Beryllium copper per QQ–C–530 heat treated per MIL–H–7199	Beryllium copper per QQ–C–530 heat treated per MIL–H–7199
		Finish: .00005" min gold plated per MIL–G–45204 type 1, Grade C.	Finish: .00005" min gold plated per MIL–G–45204 type 1, Grade C.
Insulator		PTFE	PTFE
Gasket		Silicone rubber	Silicone rubber
Crimp ferrule		Seamless copper tubing alloy	Seamless copper tubing alloy
Selection Guide		*Suitable for direct mounting on aluminium panels *Lowest cost	*For commercial application only *Lower cost



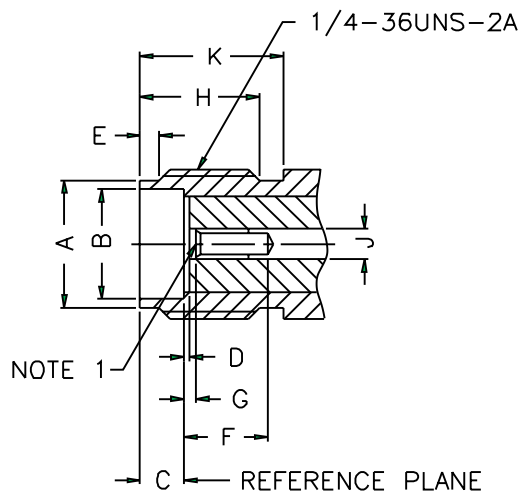
SMA COAXIAL CONNECTORS

INTERFACE MATING DIMENSIONS



PLUG

Letter	Millimeters [Inches]	
	Minimum	Maximum
A	6.35 [.250]	6.73 [.265]
B	4.53 [.178]	4.59 [.181]
C	2.54 [.100]	3.43 [.135]
D	0.00	0.25 [.010]
E	1.91 [.075]	2.54 [.100]
F	0.00	0.25 [.010]
G	0.90 [.035]	0.94 [.037]
H	0.00	0.38 [.015]
J	1.24 [.049]	1.30 [.051]



JACK

Letter	Millimeters [Inches]	
	Minimum	Maximum
A	5.28 [.208]	5.49 [.216]
B	4.60 [.181]	4.67 [.184]
C	1.88 [.074]	1.98 [.078]
D	0.00	0.25 [.010]
E	0.38 [.015]	1.14 [.045]
F	2.92 [.115]	–
G	0.00	0.25 [.010]
H	4.32 [.170]	–
J	1.24 [.049]	1.30 [.051]
K	5.54 [.218]	–

NOTE: 1. I.D. TO MEET VSWR AND CONTACT RESISTANCE WHEN MATED WITH 1.32/1.37 MM DIA. PIN.

SMA COAXIAL CONNECTORS

All connectors listed, unless otherwise noted, are Commercial Grade construction, gold-plated brass bodies with 50 μ " gold contacts. All insulators are teflon. All other parameters are equal to Mil Standard construction.

Mil Standard connectors, i.e. Stainless Steel body, available upon request as per material specifications listed in Material section on preceding page.

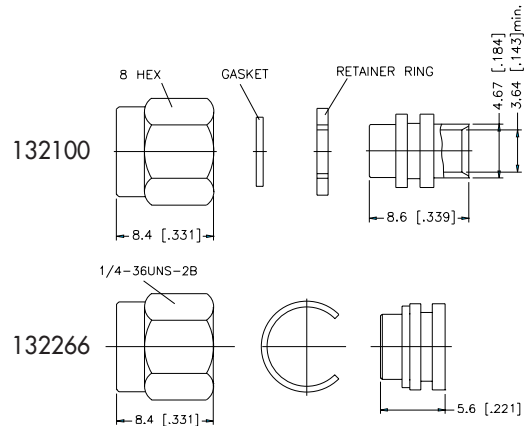
All dimensions in millimeters and [inches].

C A B L E G R O U P L E G E N D					
01	58/ 58A/ 58C/ 141/ 303/ LMR195™/ B7806A	06A	179/ U DOUBLE BRAIDED	09	B8227/ 89207
01A	55/ 142/ 223/ 400	07	8/ 8A/ 213/ 393	10	.141 SEMI-RIGID/ 402/U
01B	LMR200™/ B7807A	07A	214	11	.085 SEMI-RIGID/ 405/U
02	58 PLENUM/THINNET/ 122U/ B88240/ B89907	07B	8X/ LMR240™/ B7808A	12	.250 SEMI-RIGID
03	59/ 62/ 140/ 210	07C	B9913/ LMR400™/ B7810A/ B8214	13	.047 SEMI-RIGID/ B1674A
03A	59/ U-20AWG	07D	B89913	14	178/ 196
04	59/ U PLENUM	07E	11	15	B8281/ B9231/ B9141
04A	59/ U PLENUM-20AWG	07F	11/ U-14AWG/ B8213/ B9292/ B7731/ B1859A	15A	B88281
05	174/ 188A/ 316/ B7805A	08	6/ 143/ 212	16	180/ 195/ 122/ B8218/ B1865A/ B1855
05A	316/ U DOUBLE BRAIDED	08A	B1694A/ B9248	17	LMR600™
06	179/ 187/ B9221	08B	6 PLENUM/ B1695A	18	AT&T734A/ B1505A
				19	AT&T735A/ B735A1

DIRECT SOLDER FOR SEMI-RIGID .047", .085" AND .141" CABLE

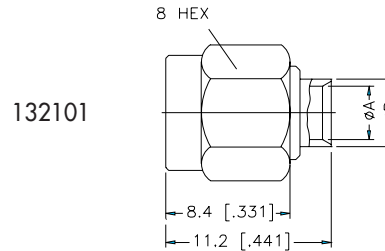
STRAIGHT CABLE PLUG — CABLE CENTER CONTACT

P.N.	Cable Group	Finish	Insulation	Impedance	Crimp Tool
132100	10	Gold	N/A	50	N/A
132100SS	10	S/S STAINLESS STEEL	N/A	50	N/A
132266	10	Gold SHORT PROFILE	N/A	50	N/A
132266SS	10	S/S STAINLESS STEEL, SHORT PROFILE	N/A	50	N/A

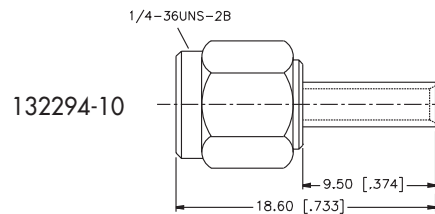
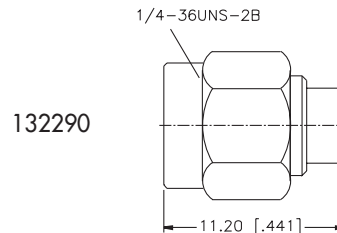


STRAIGHT CABLE PLUG — WITH CONTACT

P.N.	Cable Group	Finish	Insulation	Impedance	Crimp Tool
132101	11	Gold	Teflon	50	N/A
132102	10	Gold	Teflon	50	N/A
132200	10	Gold STAINLESS STEEL	Teflon	50	N/A
132248	11	Gold STAINLESS STEEL NUT	Teflon	50	N/A
132296	12	Gold	Teflon	50	N/A
132249	13	Gold	Teflon	50	N/A

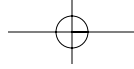


132290	10	Gold CONTACT IN BODY	Teflon	50	N/A
132294	11	Gold CONTACT IN BODY	Teflon	50	N/A
132290-10	10	Gold EXTENDED BODY	Teflon	50	N/A
132294-10	11	Gold EXTENDED BODY	Teflon	50	N/A



Cable: .047" Cable, A = 1.24 mm [.049"] min,
 B = 3.0 mm [.118"] min
 .085" Cable, A = 2.2 mm [.087"] min,
 B = 3.0 mm [.118"] min
 .141" Cable, A = 3.6 mm [.142"] min,
 B = 4.6 mm [.181"] min

For Reverse Polarized connectors, add RP to standard part number. Contact Connex marketing for availability.
 For Reverse Threaded connectors, add RT to standard part number. Contact Connex marketing for availability.
 For Crimp Tool information, see page 183.

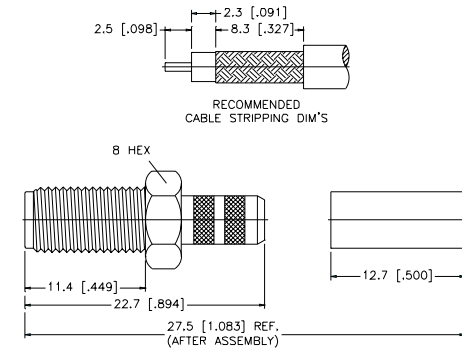
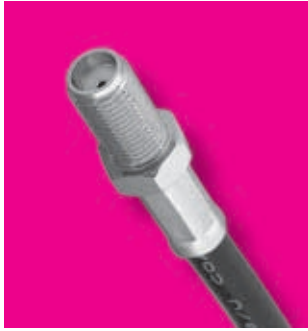


CRIMP TERMINATIONS FOR FLEXIBLE CABLE

For Cable Group Legend, see page 27

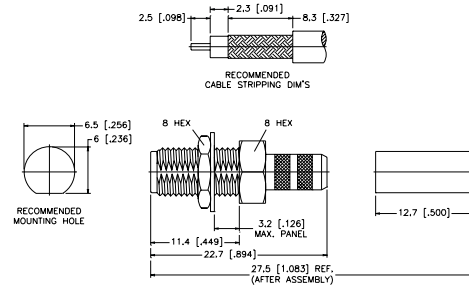
STRAIGHT CRIMP JACK — STANDARD & MINIATURE CABLE

P.N.	Cable Group	Finish	Insulation	Impedance	Crimp Tool
STANDARD CABLE					
132116	01	Gold	Teflon	50	A
132197	01A	Gold	Teflon	50	A
132236	01B	Gold	Teflon	50	A
132240	07B	Gold	Teflon	50	A
132332	07C	Gold	Teflon	50	L
MINIATURE CABLE					
132117	05	Gold	Teflon	50	B
132198	05A	Gold	Teflon	50	C
132229	05	Gold	Teflon	50	B
SHORT BODY					
132279	14	Gold	Teflon	50	B



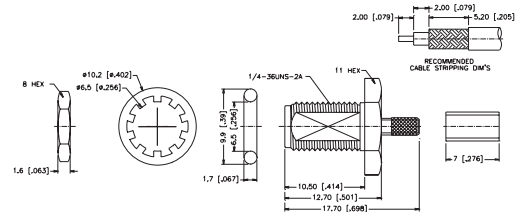
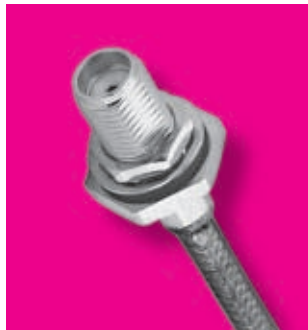
BULKHEAD CRIMP JACK — STANDARD & MINIATURE CABLE

P.N.	Cable Group	Finish	Insulation	Impedance	Crimp Tool
STANDARD CABLE					
132118	01	Gold	Teflon	50	A
132191	01A	Gold	Teflon	50	A
132237	01B	Gold	Teflon	50	A
132241	07B	Gold	Teflon	50	A
132333	07C	Gold	Teflon	50	L
MINIATURE CABLE					
132119	05	Gold	Teflon	50	B
132176	05A	Gold	Teflon	50	C
132220	14	Gold	Teflon	50	B



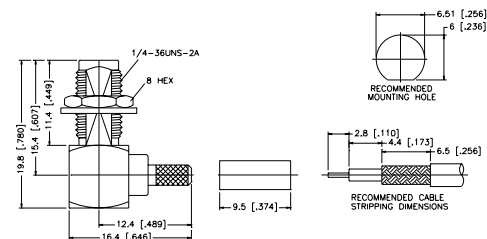
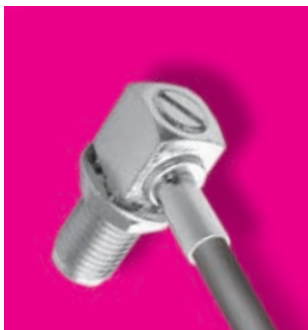
BULKHEAD CRIMP JACK — O-RING SEAL — STANDARD & MINIATURE CABLE

P.N.	Cable Group	Finish	Insulation	Impedance	Crimp Tool
STANDARD CABLE					
132280	01	Gold	Teflon	50	A
132281	01A	Gold	Teflon	50	A
132282	01B	Gold	Teflon	50	A
132283	07B	Gold	Teflon	50	A
MINIATURE CABLE					
132284	05	Gold	Teflon	50	B
132285	05A	Gold	Teflon	50	C
132286	14	Gold	Teflon	50	B



RIGHT ANGLE BULKHEAD CRIMP JACK — STANDARD & MINIATURE CABLE

P.N.	Cable Group	Finish	Insulation	Impedance	Crimp Tool
132246	01	Gold	Teflon	50	A
132260	01A	Gold	Teflon	50	A
132245	05	Gold	Teflon	50	B
132259	05A	Gold	Teflon	50	C



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 For Crimp Tool information, see page 183.

