

TEST/CHARACTERISTICS	MIL-C-39012 A	VALUES/REMARKS
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### ELECTRICAL CHARACTERISTICS

Impedance		50 Ω			
Frequency range		DC-4 GHz			
V.S.W.R. (typ.) Straight models	cable group: Frequency .085" 2 2.6	3-14	1 GHz 1.12 1.10 1.12	2.5 GHz 1.22 1.22 1.22	4 GHz 1.33 1.33 1.35
Right angle models	.085" 2		1.10 1.10	1.18 1.20	1.26 1.25
Insertion loss (typ.) Straight models	cable group: .085" 2 2.6	3-27	0.05 0.05 0.05	0.07 0.10 0.05	0.15 0.25 0.05
Right angle models	.085"		0.05	0.07	0.12
RF leakage		3-26	-55 dB min from 2 to 3 GHz		
Insulation resistance		3-11	1000 MΩ min		
Contact resistance	center contact (mΩ) outer contact (mΩ)	3-16	Initial 6 1	After test 8 1.5	
Working voltage	Cable group at sea level at 70000 ft (21000 m)		2/50 250 V rms 60 V rms	2.6/50 335 V rms 85 V rms	
Dielectric withstanding voltage	Cable group at sea level at 70000 ft (21000 m)	3-17	2/50 750 V rms 185 V rms	2.6/50 1000 V rms 250 V rms	
RF withstanding voltage (5 MHz sine wave)	Cable group at sea level	3-23	2/50 500 V rms	2.6/50 700 V rms	

### MECHANICAL CHARACTERISTICS

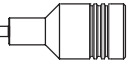
Durability		3-15	500 matings		
Mating / unmating		3-5-1	axial force : 62 N max (14 Lbf)		
Cabling retention force	cable group: 2/50 2.6/50	3-24	58 N (13 Lbf) 110 N (25 Lbf)		
Center contact retention			Axial : 10 N (2.25 Lbf)		

### ENVIRONMENTAL CHARACTERISTICS

Temperature range	standard models hermetic sealed models models for semi-rigid cables		-65 °C / + 165 °C -65 °C / +165 °C -65 °C / +105 °C		
Combined climate tests			MIL-STD-202. method 102. condition C		
Thermal shock		3-20	MIL-STD-202. method 107. condition B		
High temperature endurance			MIL-STD-202. method 108		
Corrosion (salt spray)		3-13	MIL-STD-202. method 101. condition B, 5%		

All dimensions are given in millimeters

Standard packaging : 100 pieces (Same part number). For unit packaging, add "W" after the P/N.



### ENVIRONMENTAL CHARACTERISTICS

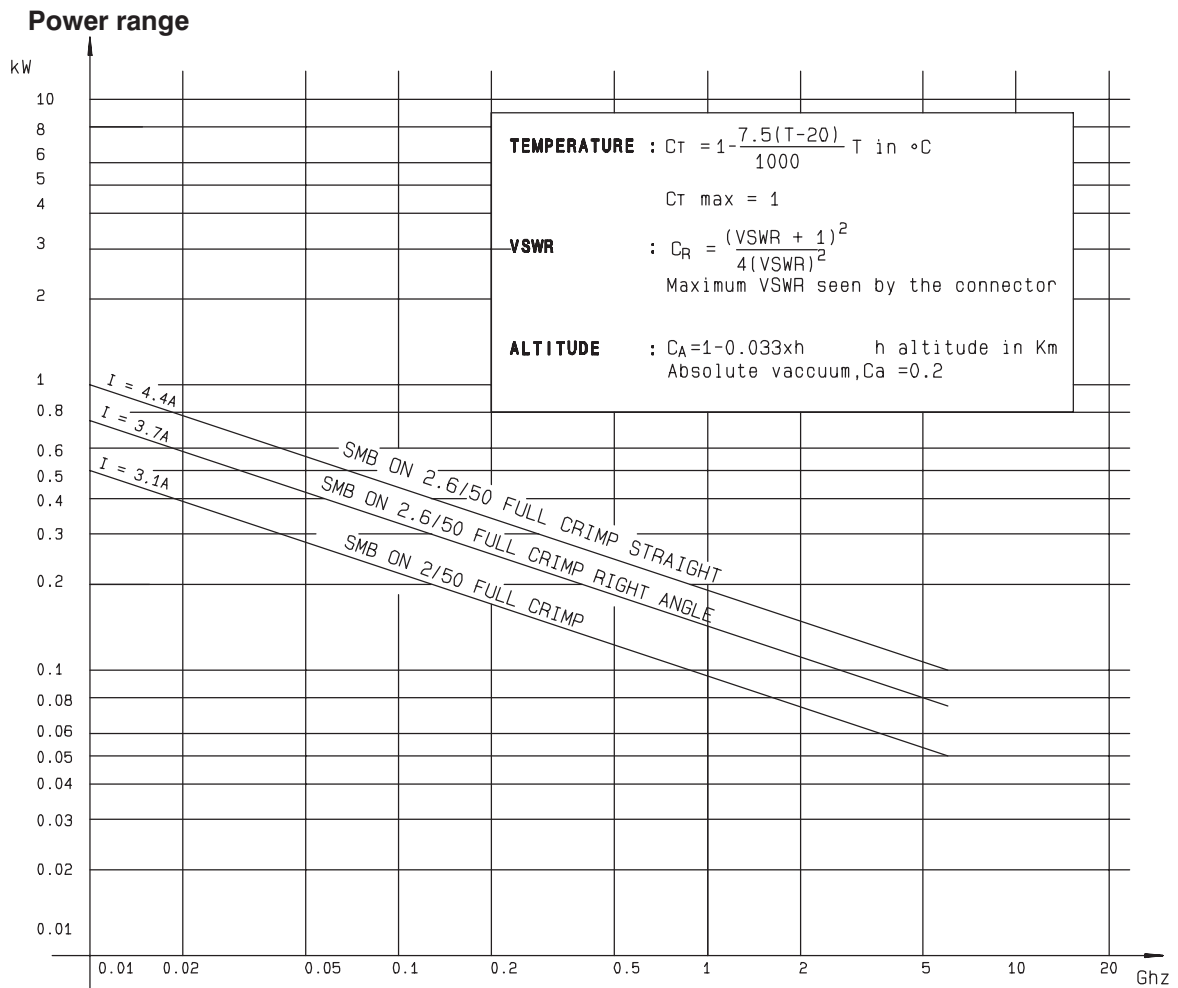
Vibrations	3-18	MIL-STD-202. method 204. condition B, 15g
Shocks	3-19	MIL-STD-202. method 213. condition B, 75g
Low pressure	3-22	MIL-STD-202. method 105. condition C
Hermetic seal		applied vacuum $10^{-6}$ mm of Hg (Torr) leakage rate $< 10^{-6}$ atm/cm <sup>3</sup> /s

### MATERIALS

Body and center pin contact		half hard brass as per QQ-B-626
Center socket contact		beryllium copper as per QQ-C-530
Ferrules		brass
Insulators		PTFE teflon
Gaskets		silicone elastomer

### PLATING

Body		gold or nickel
Center contacts		gold



All dimensions are given in millimeters

Standard packaging : 100 pieces (Same part number). For unit packaging, add "W" after the P/N.

## STRAIGHT PLUGS CRIMP TYPE FOR FLEXIBLE CABLES

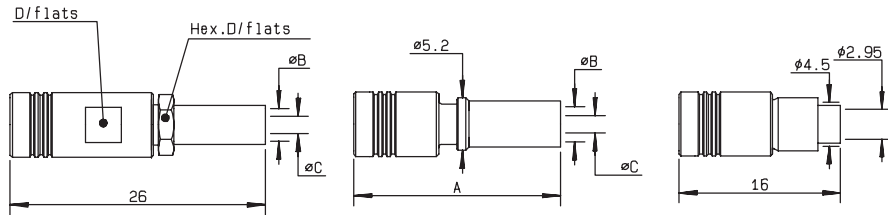


Fig. 1

Fig. 2

Fig. 3

cable	part number	fig.	dimensions				captive center contact	assembly	finish	note
			A	B	C	D				
2/50/S	R114 073 000	1		2.55	0.95	5	yes	M03	Gold	
2/50/S	R114 073 134*●	1		2.55	0.95	5.5	yes	M03	Gold	
2/50/S	R114 081 020*●	2	20.4	3.25	0.95		yes	M10	Nickel	full crimp
2.6/50/S	R114 015 000	3					yes	M11	Gold	reverse crimping/full crimp
2.6/50+75/S	R114 075 000	1		3.25	1.7	5	yes	M03	Gold	
2.6/50+75/S	R114 075 134	1		3.25	1.7	5.5	yes	M03	Gold	
2.6/50+75/S	R114 082 000	2	19.8	3.25	1.7		yes	M10	Gold	full crimp
2.6/50+75/S	R114 082 020	2	19.8	3.25	1.7		yes	M10	Nickel	full crimp
2.6/50/D	R114 083 000	2	18.8	3.25	1.7		yes	M10	Gold	full crimp
2.6/50/D	R114 083 020	2	18.8	3.25	1.7		yes	M10	Nickel	full crimp

## STRAIGHT PLUGS CLAMP TYPE FOR FLEXIBLE CABLES

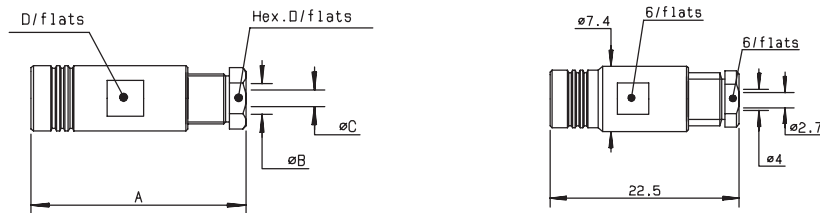


Fig. 1

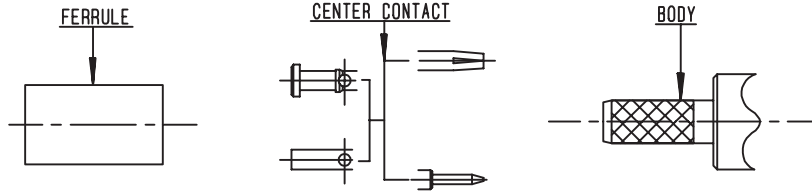
Fig. 2

cable	part number	fig.	dimensions				captive center contact	assembly	finish	note
			A	B	C	D				
2/50/S	R114 003 000	1	21.8	2.2	0.95	5	yes	M02	Gold	
2/50/S	R114 003 020*●	1	17	2.2	0.95	5.5	yes	M01	Nickel	conical braid clamp
2/50/S	R114 003 133	1	17	2.2	0.95	5.5	yes	M01	Gold	conical braid clamp
2.6/50+75/S	R114 005 000	1	21.8	3	1.7	5	yes	M02	Gold	
2.6/50+75/S	R114 005 133	1	17	3	1.7	5.5	yes	M01	Gold	conical braid clamp
3.8/95/S	R114 009 000*●	2					yes	M02	Gold	RG180 cable

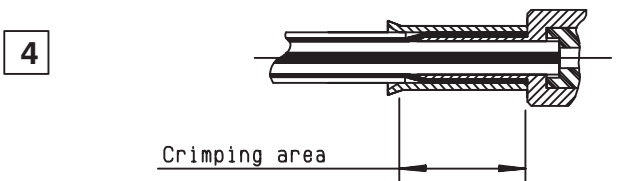
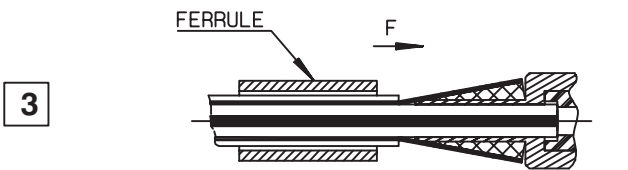
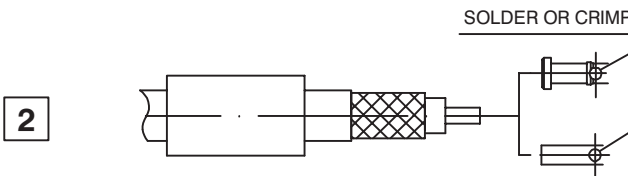
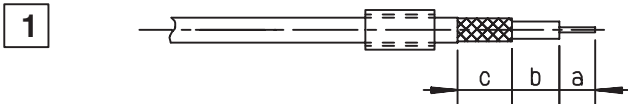
● upon request

\* packaging: unit

## M 10



P/N	STRIPPING DIM.			HEX. DIM. H	FERRULE CRIMP TOOL		CENTER CONTACT CRIMP TOOL			
	a	b	c		DIES INCLUDED	MIL STANDARD R282 293 000 (M22520/5-01)+POSITIONER	MIL STANDARD R282 281 000 (M22520/2-01)+POSITIONER			
R114 081 020	2.5	2.5	6	3.25	R282 211 000	R282 235 003 (M22520/5-03)	R282 983 000 (position 3) for 50 cables (position 1) for 75 cables			
R114 082 000	2.5	3.1	5.4							
R114 082 020	2.5	3.1	5.4							
R114 083 000 R114 083 020	2.5	3.1	5.4							
R114 186 420	3	3	6	3.25	R282 211 000					
R114 192 420	3	3.2	6.5	5.4	R282 223 000	R282 235 011 (M22520/5-11)	R282 967 010 (position 5)			
R114 238 000 R114 238 120 R114 245 020 R114 313 000	2.5	3.1	5.4	3.25	R282 211 000	R282 235 003 (M22520/5-03)	R282 983 000 (position 3) for 50 cables (position 1) for 75 cables			
R114 313 020 R114 315 000								2.5	3	4.5



- 1.1 Slide the ferrule nut onto the cable.
- 1.2 Strip the cable.

- 2.1 Slide center contact on until it bottoms against cable dielectric.
- 2.2 Solder center contact or crimp.

- 3.1 Fan the braid.
- 3.2 Slide the cable into the body until it bottoms against insulator.
- 3.3 Slide the ferrule over the braid. (In direction F)

- 4.1 Crimp the ferrule.
- 4.2 Cut the exees of braid if necessary.