

Overview

The SMPM product series is a micro-miniature interface with a frequency range of DC to 20GHz. It is commonly used in miniaturized high frequency applications and is ideal for high vibration environments when mated with limited or full detent pcb connectors.

These assemblies feature a SMPM Straight Plug to SMPM Straight Plug on industry standard .085 and .047 inch diameter Conformable cable. Standard imperial lengths range from 3 to 48 inches with metric lengths from 100 to 2000 millimeters.

Features and Benefits

- RF performance DC to 20 GHz
- Designed to accommodate both radial and axial misalignment
- Push-on mating styles for quick installation
- Axial misalignment: +/- 1 mm
- Small package size

Applications

- Antennas
- Backplane
- Broadband
- Wireless
- Military
- Instrumentation

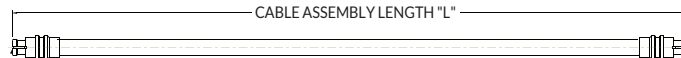
Amphenol RF

Four Old Newtown Road
Danbury, CT 06810

For more information visit www.amphenolrf.com
or call 800.627.7100

Ordering Information

SMPM Cable Assemblies on .085 inch diameter Conformable Cable



Part Number	Length (in)	Length (mm)
095-725-111-030	3.00	76
095-725-111M010	3.94	100
095-725-111-040	4.00	102
095-725-111-050	5.00	127
095-725-111-060	6.00	152
095-725-111-070	7.00	178
095-725-111-080	8.00	203
095-725-111-090	9.00	229
095-725-111M025	9.84	250
095-725-111-100	10.00	254
095-725-111-110	11.00	279
095-725-111-120	12.00	305
095-725-111-180	18.00	457
095-725-111M050	19.69	500
095-725-111-240	24.00	610
095-725-111M075	29.53	750
095-725-111-360	36.00	914
095-725-111M100	39.37	1000
095-725-111-480	48.00	1219
095-725-111M200	78.74	2000

SMPM Cable Assemblies on .047 inch diameter Conformable Cable



Part Number	Length (in)	Length (mm)
095-725-112-030	3.00	76
095-725-112M010	3.94	100
095-725-112-040	4.00	102
095-725-112-050	5.00	127
095-725-112-060	6.00	152
095-725-112-070	7.00	178
095-725-112-080	8.00	203
095-725-112-090	9.00	229
095-725-112M025	9.84	250
095-725-112-100	10.00	254
095-725-112-110	11.00	279
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095-725-112M050	19.69	500
095-725-112-240	24.00	610
095-725-112M075	29.53	750
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095-725-112M100	39.37	1000
095-725-112-480	48.00	1219
095-725-112M200	78.74	2000

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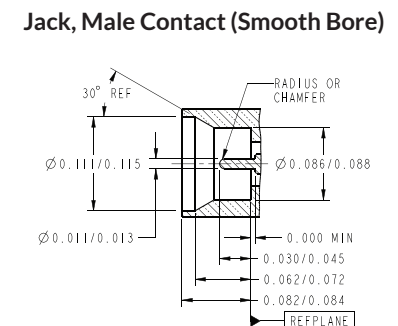
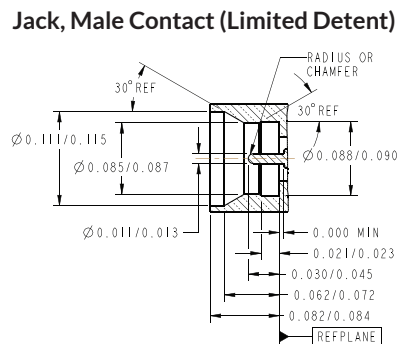
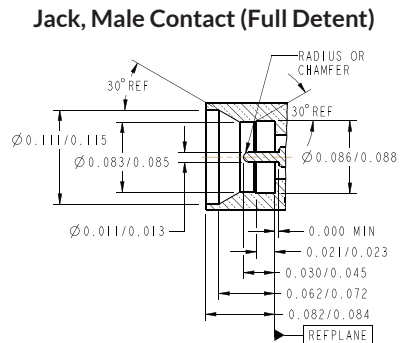
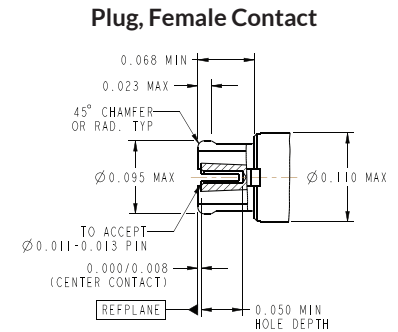
Technical Specifications

Electrical	SMPM Cable Assemblies
Impedance	50 Ω
Frequency range	DC - 20 GHz
Insertion Loss	$\leq 0.03 \times \text{SQFT}[f(\text{GHz})]\text{dB}$
Insulation Resistance	$\geq 5\text{M}\Omega$ min
Center Contact Resistance	$\leq 6\text{m}\Omega$
Outer Contact Resistance	$\leq 2\text{m}\Omega$
Dielectric Withstanding Voltage	335 VRMS min.
Contact current	$\leq 15\text{A DC}$
RF leakage - Interface	$\geq 80\text{dB @ DC to 4 GHz}$

Environmental	
Temperature range	-65 °C to +165 °C
Thermal shock	IEC 60169-1, Sub-clause 16.4 (-65 °C to +165 °C)
Climatic category	IEC 60169-1, Sub-clause 18 (+165 °C, 1000 hours)
Vibration	IEC 60068-2-64 random
Shock	IEC 60068-2-27 (50g, 11 ms, half-sine)
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.

Mechanical	
Mating cycles	Full detent: ≥ 100
	Limited detent: ≥ 100
	Smooth bore, Catchers mitt: ≥ 1000
Center contact captivation	axial: $\geq 1.5\text{ lbs (6.7 N)}$ typical
Engagement force	Full detent: 4.5 lbs (20 N) typical
	Smooth bore: 2.5 lbs (11.1 N) typical
Disengagement force	Full detent: $\geq 6.5\text{ lbs (28.9 N)}$ typical
	Smooth bore: $\geq 1.5\text{ lbs (6.7 N)}$ typical
Axial misalignment	$\pm .25\text{mm}$
Radial misalignment	$\pm 51\text{mm}$
Board-to-board distance (min.)	8.65mm (solder paste thickness not included)

Interface Diagrams



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