PSMP
Board to Board Solutions

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Amphenol® RF

New Product Alert

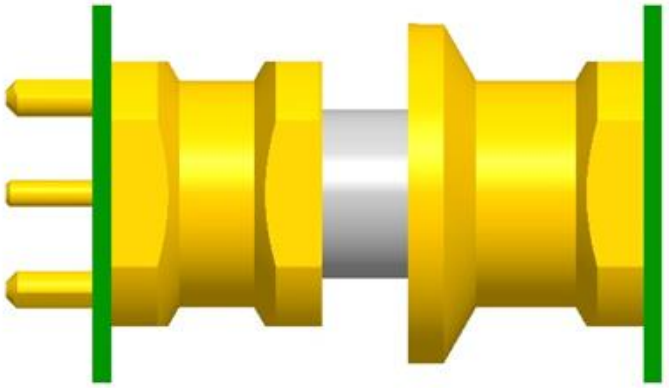
Overview

- Perfect solution for board-to-board applications requiring high power
- Three-piece design
  - Limited Detent PCB
  - Smooth Bore PCB
  - Buller Adapter
- Maximizes PCB density
- Ideal for blindmating

- 50 Ohm
- 10 GHz operation
- 200 W @ 2.2 GHz
- 12.6 mm minimum board spacing
- Axial misalignment: ±1 mm
- Radial misalignment: 4°

Applications

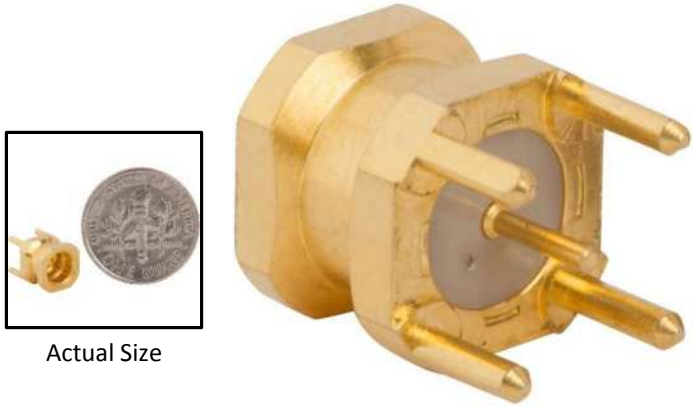
- Base Stations
- Filters
- Amplifiers
- Handheld Radio
- Anywhere SMPs are used



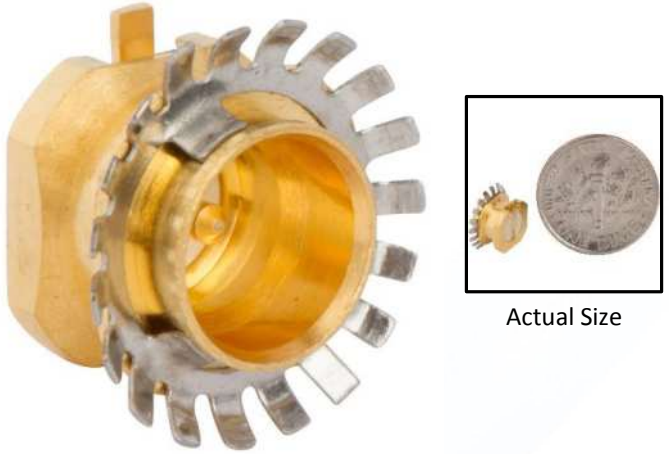
Ordering Information

- Limited Detent Parts

Part Number	Description
PSMP-MSLD-PCT25	PSMP PCB Jack, Male Contact, Through-Hole 2.5mm Legs, Limited Detent, 50 Ohm
PSMP-MSLD-PCT35	PSMP PCB Jack, Male Contact, Through-Hole 3.5mm Legs, Limited Detent, 50 Ohm
PSMP-MSLD-PCT1R	PSMP PCB Jack, Male SMT R/A Contact, Through-Hole 1.0mm Legs, Limited Detent, 50 Ohm
PSMP-MSLD-PCTEM	PSMP PCB Jack, Male Contact, Through-Hole 2.5mm Legs, Limited Detent, EMI Ring, 50 Ohm
PSMP-MSLD-PCSEM	PSMP PCB Jack, Male Contact, Surface Mount, Limited Detent, EMI Ring, 50 Ohm
PSMP-MSLD-PCS	PSMP PCB Jack, Male Contact, Surface Mount, Limited Detent, 50 Ohm
PSMP-MSLD-PCE	PSMP PCB Jack, Male Contact, Edge Mount, Limited Detent, 50 Ohm
PSMP-MSLD-CSB	PSMP PCB Jack, Male Contact, Bulkhead Mount, Post Termination, Limited Detent, 50 Ohm



PSMP-MSLD-PCT35



PSMP-MSLD-PCSEM

Ordering Information

- Smooth Bore Parts

Part Number	Description
PSMP-MSSB-PCT1R	PSMP PCB Jack, Male SMT R/A Contact, Through-Hole 1.0mm Legs, Smooth Bore, 50 Ohm
PSMP-MSSB-PCT35	PSMP PCB Jack, Male Contact, Through-Hole 3.5mm Legs, Smooth Bore, 50 Ohm
PSMP-MSSB-PCS	PSMP PCB Jack, Male Contact, Surface Mount, Smooth Bore, 50 Ohm
PSMP-MSSB-CSB	PSMP PCB Jack, Male Contact, Bulkhead Mount, Post Termination, Smooth Bore, 50 Ohm



PSMP-MSSB-PCS



Ordering Information

- Bullet Adapters

Part Number	Description	Length
PSMP-FSBA-1000	PSMP Bullet Adapter, Plug to Plug, Female Contact	10.00 mm
PSMP-FSBA-1042	PSMP Bullet Adapter, Plug to Plug, Female Contact	10.42 mm
PSMP-FSBA-1175	PSMP Bullet Adapter, Plug to Plug, Female Contact	11.75 mm
PSMP-FSBA-1755	PSMP Bullet Adapter, Plug to Plug, Female Contact	17.55 mm
PSMP-FSBA-1970	PSMP Bullet Adapter, Plug to Plug, Female Contact	19.70 mm
PSMP-FSBA-2380	PSMP Bullet Adapter, Plug to Plug, Female Contact	23.80 mm
PSMP-FSBA-2580	PSMP Bullet Adapter, Plug to Plug, Female Contact	25.80 mm

PSMP-FSBA-1755





PSMP-FSBA-1970

Board to Board Products Comparison

		AFI-50	AFI-75	HD-AFI-75	HD-AFI-50	AFI-Dart-75	AFI-Dart-50	SMP	SMPM	P-SMP
Electrical	*Frequency (GHz)*	DC - 6	DC - 3	DC - 18	DC - 18	DC - 18	DC - 18	DC - 40	DC - 65	DC-10
	Return Loss [VSWR] (frequency in GHz) Range #1	-25 dB [1.12] DC-3	-26 dB [1.11] DC-1	-30 dB [1.11] DC-1	-23 dB [1.15] DC-3	-30 dB [1.11] DC-1	-23 dB [1.15] DC-3	-23 dB [1.15] DC - 26.5	-23 dB [1.15] DC - 26.5	-32 dB [1.05] DC - 3 (Cabled)
	Return Loss [VSWR] (frequency in GHz) Range #2	-17.7 dB [1.3] 3 6	-17.7 dB [1.3] DC-3	-22 dB [1.17] DC-3	-19 dB [1.25] 3-6	-22 dB [1.17] DC-3	-19 dB [1.25] 3-6			-26 dB [1.11] 3 - 6 (Cabled)
	Isolation [@ min pitch] (@ Frequency GHz)					-90 dB [4.5 mm] [1 GHz]	-70 dB [4.5 mm] [4 GHz]			
	Nominal Impedance (Ohm)	50	75	75	50	75	50	50	50	50
	RF Leakage (dB) (@ frequency GHz)	-70 (3)	-70 (3)	-70 (3)	-70 (3)	-70 (3)	-70 (3)	-80	-80	-75 (4)
	Power Handling (Watts)	200 DC-2 GHz	95 DC-1 GHz	10 DC-2 GHz	20 DC-3 GHz	10 DC-2 GHz	20 DC-3 GHz	30 1 GHz		200 DC-2.2 GHz
	Intermodulation 3rd Order	< -150 dBc (2 x 43 dBm)								< -160 dBc (2 x 43 dBm)
Mechanical (Note: Total Misalignment includes +/- tolerance, e.g. total 1.0 = +/-0.5 mm)	*Mating Cycles*	100	100	200	200	200	200	100-1000	100-1000	100-1000
	Engagement force (N)	22 Max.	22 Max.	6 Max.	6 Max.	6 Max.	6 Max.	40 Max.	11-19 Max.	10-68 Max
	Disengagement Force (N)	2 Min.	2 Min.	1 Min.	1 Min.	1 Min.	1 Min.	2 Min.		2.2-25 Min
	Total Max. Axial Misalignment (mm)	1	1	2	2	2	2	0.25	0.25	2
	Total Max. Radial Misalignment (mm)	0.8	0.8	0.8	1	1	1	0.51	0.51	1.32
	Total Max. Radial Gathering (mm)	2	2	2						
	Total Min. Board to Board Spacing (mm)	12.7	12.7	12	12	10	10	9	7.95	12.6
	Protective Shroud	Y	Y	Y	Y	N	N	N	N	N
	Variable Bullet Length	N	N	Y	Y	Y	Y	Y	Y	Y
	Closed Entry Contact	N	N	Y	Y	Y	Y	N	N	N
Manufacturing methods	*Body Construction*	Machined/ Die-cast	Machined/ Die-cast	Machined/ Die-cast	Machined/ Die-cast	Stamped/ Molded	Stamped/ Molded	Machined	Machined	Machined
	Bullet Construction	Sheet Metal Stamped	Sheet metal Stamped	Machined	Machined	Stamped/ Molded	Stamped/ Molded	Machined	Machined	Machined