

Power-SMP (PSMP) GENERAL DATASHEET

page 1 / 2

Electrical characteristics

Characteristic impedance	50	Ω
Frequency range	DC -10	GHz
Return loss (straigh contacts)	$\geq 32\text{dB @ DC to 3GHZ}$ $\geq 26\text{dB @ 3GHz to 6GHz}$	
Insertion loss	$\leq 0.03 \times \sqrt{f}$ (GHz) dB	
Insulation resistance	≥ 5	$G\Omega$
Center contact resistance	≤ 3	$m\Omega$
Outer contact resistance	≤ 2	$m\Omega$
Test voltage	1000	V rms
Working voltage	480	V rms
Power handling	200W @ 2,2GHz	
Contact current	≤ 1.2 A DC	
RF-Leakage	$\geq 70\text{dB @ DC to 1GHz}$	
Intermodulation 3rd order	$\geq 160\text{dBc (2x43dBm)}$ static	

Mechanical characteristics

Engagement force	smooth bore,Catchers mitt	≤ 10	N
	limited detent	≤ 45	N
	full detent	≤ 68	N
Disengagement force	smooth bore,Catchers mitt	$\geq 2,2$	N
	limited detent	≥ 15	N
	full detent	$\geq 25\text{N}$	N
Center contact captivation	axial	≥ 7	N
Mating cycles	smooth bore,Catchers mitt	≥ 1000 cycles	
	limited detent	≥ 500 cycles	
	full detent	≥ 100 cycles	
Board to Board distance (min)		12,6	mm
Permits axial misalignment of		± 1 max.	mm
Permits radial misalignment of		4° max.	

Materials

Outer contact	Brass
Centre contact	Brass
Spring loaded contacts	CuBe
Insulator	PTFE / Peek / LCP
Crimp ferrule	Copper alloy / Brass

Standard plating

Outer contact	Au / White bronze
Centre contact	Au
Spring loaded contacts	Au
Crimp ferrule	Au / White bronze

Environmental influences

Temperature range	-65°C up to +165°C
Vibration	MIL-STD-202 Meth. 204, cond.B
Corrosion resistance	MIL-STD-202 Meth. 101, cond B
Moisture resistance	MIL-STD-202 Meth. 106
Thermal shock	MIL-STD-202 Meth. 107, cond.B
Maximal soldering temperature (PCB connectors)	IEC 61760-1, +260°C for 10sec.

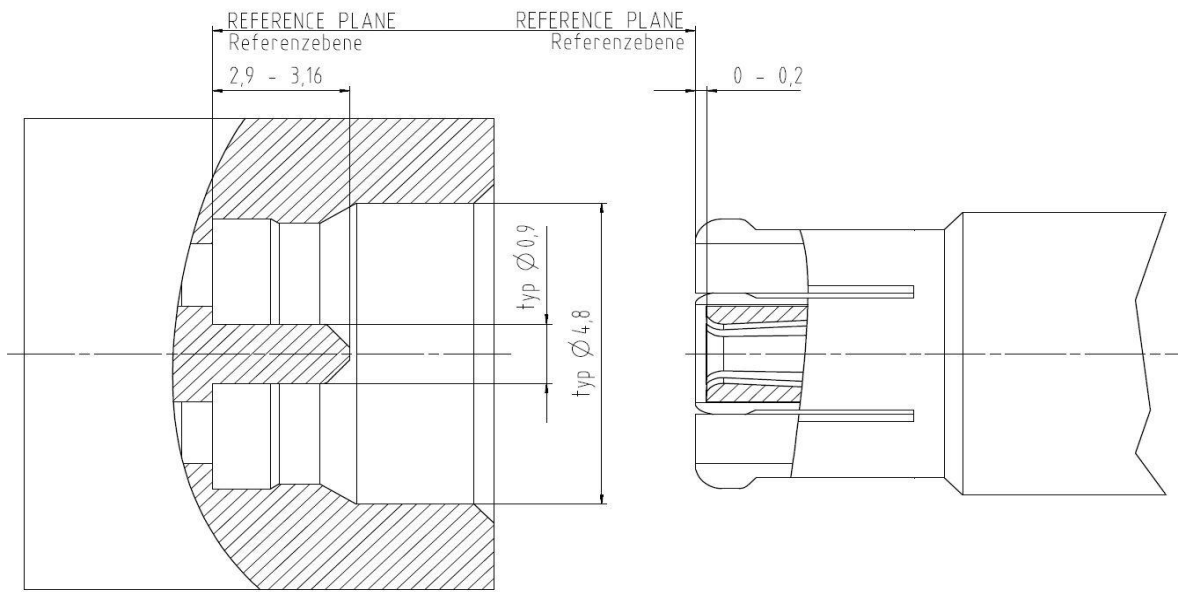
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page 2 / 2

Interface dimensions



IMS Connector Systems connectors fulfill in principle the indicated technical data. Individual values of the connectors may deviate depending based on applications, design, type of cables, assembly method and execution. Specific product data sheets for particular products can be provided on request from your IMS Connector Systems sales contact.