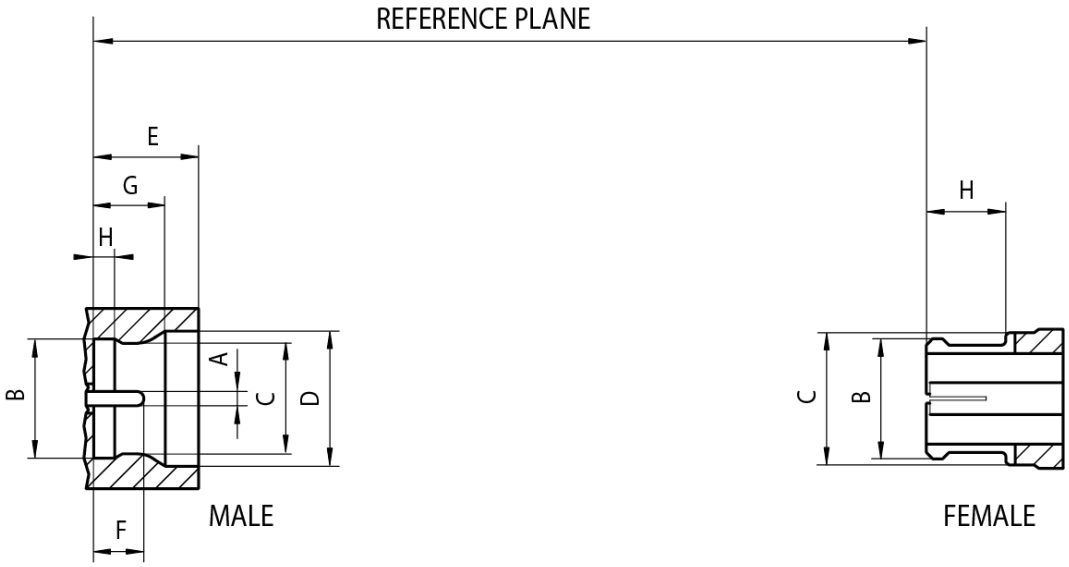
Series Specification		Rosenberger
18	Mini-SMP	**18-000-000_TD**



	Male				Female	
	Smooth bore		Full detent			
	min.	max.	min.	max.	min.	max.
A	Ø 0.28	Ø 0.33	Ø 0.28	Ø 0.33	–	–
B	Ø 2.18	Ø 2.24	Ø 2.18	Ø 2.24	–	Ø 2.41[1)]
C	–	–	Ø 2.11	Ø 2.16	–	Ø 2.79
D	Ø 2.82	Ø 2.92	Ø 2.82	Ø 2.92	–	–
E	2.08	2.13	2.08	2.13	–	–
F	0.76	1.14	0.76	1.14	–	–
G	–	–	1.57	1.83	–	–
H	–	–	0.53	0.58	1.73	–

Dimensions in mm
[1)] Resilient, dimension to meet electrical and mechanical requirements

Interface

According to	MIL-STD-348 Mateable with GPPO™ (Gilbert Engineering Co., Inc) and SSMP™ (Carlisle Interconnect Technologies)

Rosenberger Hochfrequenztechnik GmbH & Co. KG
P.O. Box 1260 D-84526 Tittmoning Germany
www.rosenberger.com

Tel. : +49 8684 18-0
Email : info@rosenberger.com

Electrical data

Impedance	50 Ω
Frequency range	DC to 65 GHz
Return loss (cable connector straight)	≥ 26 dB @ DC to 26.5 GHz ≥ 17 dB @ 26.5 GHz to 50 GHz ≥ 14 dB @ 50 GHz to 65 GHz
Insertion loss	≤ 0.1 x $\sqrt{f}$ [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 6 mΩ
Outer contact resistance	≤ 2 mΩ
Working voltage	325 V rms
Power handling	50 W @ 2.2 GHz
RF-leakage - Interface	≥ 85 dB @ DC to 4 GHz

Mechanical data

Mating cycles	Full detent: ≥ 100 Smooth bore: ≥ 500
Center contact captivation	Axial: ≥ 7 N
Engagement force	Full detent: 19 N typical Smooth bore: 11 N typical
Disengagement force	Full detent: 29 N typical Smooth bore: 7 N typical
Axial misalignment	± 0.1 mm
Radial misalignment	4° (interface)
Board-to-board distance (min.)	7.94 mm (solder paste thickness not included)

Environmental data

Temperature range	-55 °C to +155 °C
Thermal shock	MIL-STD-202, Method 107, Condition B
Climatic category	IEC 60068-2-1 55/155/21
Moisture resistance	MIL-STD-202, Method 106
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition A
Max. soldering temperature (PCB connectors)	IEC 61760-1, +260 °C for 10 sec.

Materials

Connector parts	**Material**	**Plating**
Spring loaded contact parts	CuBe	Au
Center contact	CuZn / CuBe	Au
Outer contact	CuZn / CuBe	Au
Crimping ferrule	Cu	Au
Dielectric	PTFE	

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