

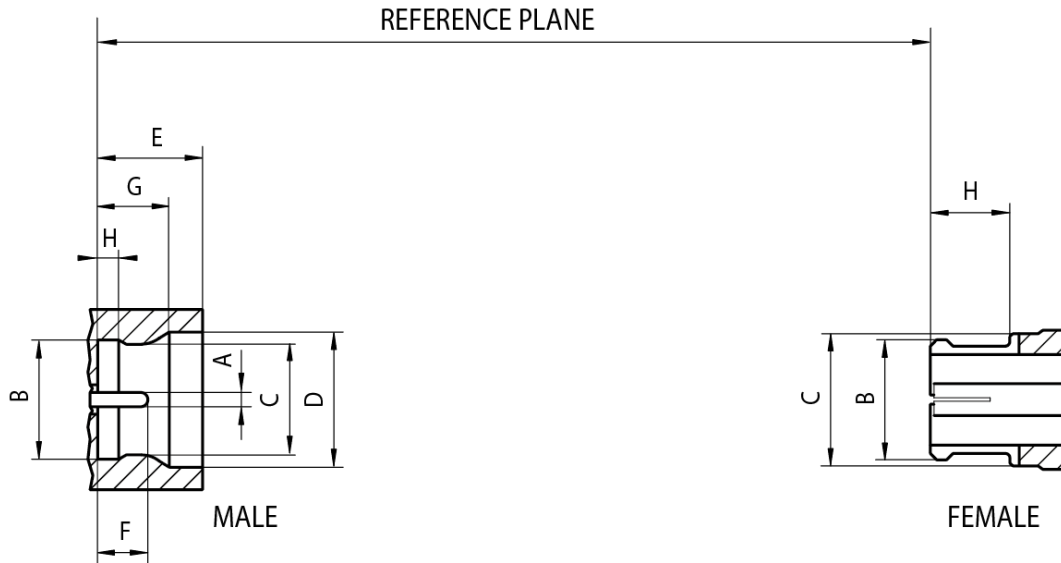
Series Specification

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)

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RFB00035

Draft	Date	Approved	Date	Rev.	Engineering Change Number	Name	Date
Chr. Janßen	04.02.2019	Chr. Janßen	04.02.2019	a00	19-s083	J_Krautenbac	12.03.2019
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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 √ 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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