



	Male						Female	
	Smooth bore		Limited detent		Full detent		min.	max.
	min.	max.	min.	max.	min.	max.		
A	Ø 0.36	Ø 0.41	Ø 0.36	Ø 0.41	Ø 0.36	Ø 0.41	1)	
B	Ø 3.12	Ø 3.23	Ø 3.00	Ø 3.10	Ø 2.90	Ø 3.00	-	-
C	Ø 3.53	Ø 3.68	Ø 3.53	Ø 3.68	Ø 3.53	Ø 3.68	-	Ø 3.43
D	-	-	Ø 3.15	Ø 3.20	Ø 3.15	Ø 3.20	0.00 nom.	
E	2.74	2.84	2.74	2.84	2.74	2.84	0.20 nom.	
F	1.14	1.40	1.14	1.40	1.14	1.40	2.84	-
G	0.84	0.94	0.84	0.94	0.84	0.94	-	-
H	-	-	1.40	1.45	1.40	1.45	-	-
I	-	-	1.98	2.08	1.98	2.08	-	-
K	-	-	2.19	2.29	2.19	2.29	-	-

Dimensions in mm

1) Resilient, dimension to meet electrical and mechanical requirements

**Interface**

According to

MIL-STD-348

Mateable with GPO™ (Gilbert Engineering Co., Inc)

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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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**Technical Data****Rosenberger**

19

SMP

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**Electrical data**

Impedance	50 Ω
Frequency range	DC to 40 GHz
Return loss (cable connector straight)	≥ 23 dB @ DC to 20 GHz ≥ 14 dB @ 20 GHz to 40 GHz
Insertion loss	≤ 0.1 x √f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 6 mΩ
Outer contact resistance	≤ 2 mΩ
Test voltage	500 V rms
Working voltage	335 V rms
Power handling	65 W @ 2.2 GHz
Contact current	≤ 1.2 A DC
RF-leakage - Interface	≥ 85 dB @ DC to 4 GHz

**Mechanical data**

Mating cycles	Full detent: ≥ 100 Limited detent: ≥ 500 Smooth bore, Catchers mitt: ≥ 1000
Center contact captivation	axial: ≥ 7 N
Engagement force	Full detent: ≤ 68 N Limited detent: ≤ 45 N Smooth bore, Catchers mitt: ≤ 9 N
Disengagement force	Full detent: ≥ 22 N Limited detent: ≥ 9 N Smooth bore, Catchers mitt: ≥ 2.2 N
Axial misalignment	± 0.3 mm
Radial misalignment	4° (interface)
Board-to-board distance (min.)	9.05 mm (solder paste thickness not included)

**Environmental data**

Temperature range	-65 °C to +155 °C
Rapid change of temperature	IEC 60068-2-14 (-65 °C to +155 °C, 1h dwell, 50 cycles)
Damp heat	IEC 60068-2-78 (40 °C, 93% RH, 56d)
Climatic category	IEC 61169-1, Sub-clause 9.4.5 (+155 °C, 1000 hours)
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	Au
Outer contact	CuZn	Au
Crimping ferrule	Cu	Au
Dielectric	PTFE / PEEK / LCP	

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