

SMP GENERAL DATASHEET

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Applicable Standards

Interface according to

Standards: MIL-STD-348A

Electrical characteristics

| | | | | |
|---------------------------|-------------|--------------------------------|------------|----------------------------|
| Characteristic impedance | | 50 | Ω | |
| Frequency range | | DC to 40 | GHz | |
| Return loss (typical) | DC - 1 GHz | ≥ 32 | dB | straight, semi-rigid cable |
| | 1 - 20 GHz | ≥ 25 | dB | straight, semi-rigid cable |
| | 20 - 40 GHz | ≥ 14 | dB | straight, semi-rigid cable |
| RF-Leakage | | | dB | |
| Insertion loss | | $\leq -x \sqrt{f}[\text{GHz}]$ | dB | |
| Insulation resistance | | ≥ 1 | G Ω | |
| Center contact resistance | | $\leq 6,0$ | m Ω | |
| Outer contact resistance | | ≤ 2 | m Ω | |
| Working current | | $\leq 1,2$ | A DC | |
| Test voltage | | 500 | V rms | |
| Working voltage | | 335 | V max. | |
| Intermodulation 3rd order | (2x43dBm) | - | dBc | |
| Power handling | @1.0GHz | | W | Data on request |
| | @4.0GHz | | W | Data on request |

Mechanical characteristics

| | | | | |
|---|----------------------|------------------------|----|--|
| Durability (matings) limited detend / smoth bore | | $\geq 1000 / \geq 500$ | | |
| Engagement force limited detend / smoth bore | | max. 45 / max. 9 | N | |
| Disengagement force limited detend / smoth bore | | min. 9 / min. 2,2 | N | |
| Misalignment of smooth bore - limited detend pair | | | | |
| | Angular misalignment | $< 4^\circ$ | | |
| | Axial misalignment | $< 0,25$ | mm | |

Materials

| | |
|-------------------|-----------------|
| Outer contact | CuBe / CuZn |
| Center contact | CuBe / CuZn |
| Crimp ferrule | Cu / CuZn |
| Other metal parts | CuZn |
| Dielectric | PTFE, PEEK, LCP |

Standard plating

| | |
|-------------------|----|
| Outer contact | Au |
| Centre contact | Au |
| Crimp ferrule | Au |
| Other metal parts | Au |

Environmental influences

| | |
|-------------------|----------------------------------|
| Temperature range | -55°C up to +125°C |
| Test categories | DIN 40045 / IEC 55/125/56 |
| Relative humidity | MIL-STD-202, Method 106 |
| Thermal shock | MIL-STD-202, Method 107, Cond. B |
| Shock | MIL-STD-202, Method 213, Cond. J |
| Vibration | MIL-STD-202, Method 204, Cond. B |

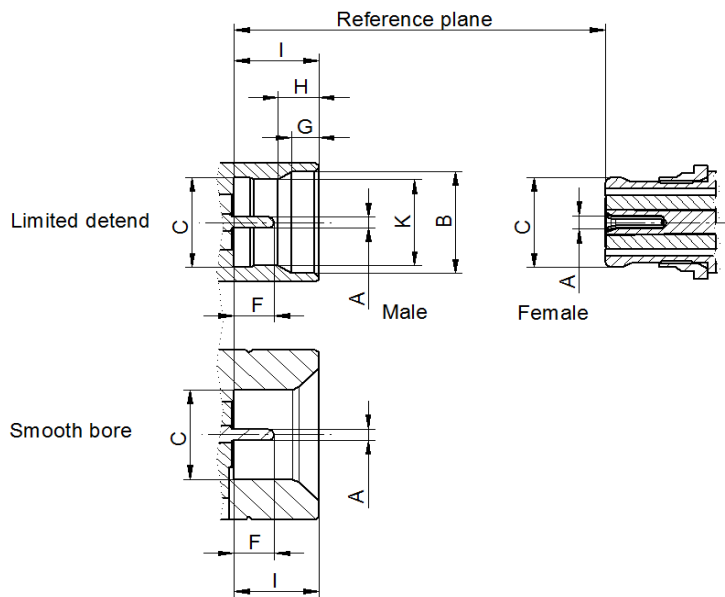
RoHS

compliant

Date: 05.12.2019 U. Mayer
 Approved: 18.12.2019 P. Schuh

Revision:

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| | Male | | Female | |
|---|------|------|--------|------|
| | min. | max. | min. | max. |
| A | 0,35 | 0,41 | | |
| B | 3,53 | 3,69 | | |
| C | 3,13 | 3,23 | | 3,43 |
| D | | | -0,07 | 0,12 |
| E | | | | 0,2 |
| F | 1,14 | 1,4 | 3,35 | |
| G | 0,84 | 0,94 | | |
| H | 1,39 | 1,45 | | |
| I | 2,74 | 2,84 | | |
| K | 3 | 3,1 | | |

Dimension in mm

Some connectors may have a specification that differs from the above mentioned data.

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

| Date | Alteration | Signature | | |
|------|------------|-----------|--|--|
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