



All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to N side: IEC 61169-16, MIL-PRF-39012, CECC 22210
7-16 side: IEC 61169-4, EN 122190, DIN 47223

Documents

N/A

Material and plating

Connector parts

Center contact
Outer contact
Dielectric

Material

CuBe or equiv.
Brass
PTFE

Plating

Silver, 3-6 µm
Flash white bronze over silver(e.g. Optargen®)

N 50 Ω

Adaptor
N Jack – 7-16 Jack

53K160-KIMN1

Electrical data

| | | |
|--|--------------------------|---------------------|
| Impedance | 50 Ω | |
| Frequency | DC to 7.5 GHz | |
| Return loss | ≥ 37 dB, DC to 2.5 GHz | |
| | ≥ 36 dB, 2.5 to 4 GHz | |
| | ≥ 25 dB, 4 to 7.5 GHz | |
| Insertion loss | ≤ 0.05 dB | |
| Insulation resistance | ≥ 5 x 10 ³ MΩ | |
| Center contact resistance | ≤ 1 mΩ, N side; | ≤ 0.4 mΩ, 7-16 side |
| Outer contact resistance | ≤ 0.25 mΩ, N side; | ≤ 1.5 mΩ, 7-16 side |
| Working voltage | 500 V rms | |
| Power handling (at 20 °C, sea level, VSWR 1.0) | 1000 W @ 1 GHz | |
| | 700 W @ 2 GHz | |
| RF-leakage | ≥ 128 dB up to 1 GHz | |
| Intermodulation (3 rd order) | ≤ -130 dBm @ 2 x 20 W | |

Mechanical data

| | | |
|-----------------------------------|------------------|-------------|
| | N side | 7-16 side |
| Mating cycles | min. 500 | min. 500 |
| Coupling nut retention | ≥ 450 N | ≥ 1000 N |
| Center contact captivation: axial | ≥ 200 N | ≥ 200 N |
| radial | ≥ 3 Ncm | ≥ 3 Ncm |
| Coupling test torque | max. 1.7 Nm | max. 35 Nm |
| Recommended torque | 0.7 Nm to 1.1 Nm | 25 to 30 Nm |

Environmental data

| | |
|-----------------------------------|------------------------|
| Temperature range | -45°C to +85°C |
| Rapid change of temperature | IEC 60068-2-14 Test Na |
| Corrosion salt mist | IEC 60068-2-11 Test Ka |
| Vibration | IEC 60068-2-6 Test Fc |
| Shock | IEC 60068-2-27 Test Ea |
| Climatic class | IEC 60068-1 (45/85/56) |
| Cold | IEC 60068-2-1 Test A |
| Dry heat | IEC 60068-2-2 Test B |
| Damp heat (steady state) | IEC 60068-2-3 Test Ca |
| Degree of protection (mated pair) | IEC 60529, IP68 |
| RoHS | compliant |

Tooling

N/A

Suitable cables

N/A

Weight

Weight 73 g/pce

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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



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|--|----------|-------------|----------|------|--|----------------|---------------|
| Draft | Date | Approved | Date | Rev. | Engineering change number | Name | Date |
| Martin Wimmer | 30.07.13 | Chr. Janßen | 22.12.20 | b00 | 20-1927 | S. Huber-Siegl | 22.12.20 |
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