



Description: Hardline Connector, R083 – 5/8 male.
(Measured with Eupen 7222 Cable)

DATA SHEET

Electrical

| | Specification | | | Standard |
|----------------------------------|---------------------|---|-----------------------|--------------------|
| Frequency Range | 5 MHz – 3.000 MHz | | | |
| Impedance | 75 Ω nominal | | | |
| | Better Than | Measured – Worst case of 5 measurements | | |
| Return Loss Gated of R083-58M | 36 dB | ≥ 39.2 dB | 5 MHz – 500 MHz | IEC 61169-1 |
| | 34 dB | ≥ 37.2 dB | 500 MHz – 860 MHz | |
| | 33 dB | ≥ 36.4 dB | 860 MHz – 1.000 MHz | |
| | 29 dB | ≥ 32.6 dB | 1.000 MHz – 1.750 MHz | |
| | 27 dB | ≥ 30.7 dB | 1.750 MHz – 2.150 MHz | |
| | 23 dB | ≥ 26.6 dB | 2.150 MHz – 3.000 MHz | |
| Return Loss of assembly | 29 dB | ≥ 32.6 dB | 5 MHz – 500 MHz | IEC 61169-1 |
| | 25 dB | ≥ 28.5 dB | 500 MHz – 860 MHz | |
| | 25 dB | ≥ 28.0 dB | 860 MHz – 1.000 MHz | |
| | 24 dB | ≥ 27.8 dB | 1.000 MHz – 1.750 MHz | |
| | 24 dB | ≥ 28.1 dB | 1.750 MHz – 2.150 MHz | |
| | 16 dB | ≥ 19.2 dB | 2.150 MHz – 3.000 MHz | |
| Insertion Loss of Assembly | 0.09 dB | ≤ 0.06 dB | 5 MHz – 500 MHz | |
| | 0.11 dB | ≤ 0.08 dB | 500 MHz – 860 MHz | |
| | 0.11 dB | ≤ 0.08 dB | 860 MHz – 1.000 MHz | |
| | 0.14 dB | ≤ 0.11 dB | 1.000 MHz – 1.750 MHz | |
| | 0.16 dB | ≤ 0.13 dB | 1.750 MHz – 2.150 MHz | |
| | 0.22 dB | ≤ 0.19 dB | 2.150 MHz – 3.000 MHz | |
| Shielding Effectiveness | Class: A++ | | | EN 50117 |
| Common Path Distortion | ≤ -110 dBc | | | ANSI/SCTE 109 2005 |
| Inner Conductor Resistance | ≤ 1 mΩ @ 1 A DC. | | | IEC 61169-1 |
| Amp. Rating | ≤ 15 A @ 60 V. | | | |
| Dielectric Strength | ≥ 3 kV. | | | IEC 61169-1 |
| Insulation Resistance | ≥ 29.99 GΩ @ 500 V. | | | IEC 61169-1 |

Environmental

| | Specification | Standard |
|--------------------------------|---------------------------|---------------|
| Temperature range Operating | -40°C to +65°C | |
| Temperature range Installation | -5°C to +50°C | |
| Sealing Test | IPX8 – 1 meter / 24 hours | IEC 60529 |
| Red Dye | | ANSI/SCTE 60 |
| Corrosion Protection | | ASTM B 117-94 |

Mechanical

| | Specification | Standard |
|-----------------|---------------|--------------|
| Interface | 5/8 male | ANSI/SCTE 92 |
| Cable Retention | ≥ 175 kgf | ANSI/SCTE 99 |

Material and Finish

| | Specification | Standard |
|------------------|-----------------------------|-----------|
| Housing | NiSn (NITIN) plated Brass | ASTM B605 |
| Inner conductor | NiSn (NITIN) plated Brass | ASTM B605 |
| Compression ring | NiSn (NITIN) plated Brass | ASTM B605 |
| O'ring | EPDM, NITRIL | |
| Insulator | Polycarbonate, Polyethylene | |

In order to continue to supply the best products, PPC reserves the right to change the products and specifications at any time without prior notice.

Measurement setup:

R083-58M – 0.5 m. cable – R083-58M.

All measurements are done with Eupen 7222 cable, length 0.50 meter.

All results are the worst case result of measurement of 5 assemblies.

Due to size of the connector, it is not possible to measure Screening Effectiveness.

All tests are performed using instruments calibrated in accordance to our ISO 9001 certification.

Return Loss and Insertion Loss are measured with Rohde & Schwarz ZNB8 Network Analyzer, according to IEC standards.

CPD (Common Path Distortion) are measured with hp Spectrum Analyzer hp 8591E, according to SCTE standard.

In case of over current (≥ 15 A.) there is a risk for high temperature inside the connector, which can cause damage of the insulator, and / or the cable.

Further test reports, technical specifications and installation instructions can be obtained on request.

