



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.

