



Description: Hardline Connector, B039 – F male.  
(Measured with Bedea Telass B75 1,1/7,3 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 of assembly	28 dB 23 dB 21 dB 15 dB 12 dB 9 dB	≥ 31.2 dB ≥ 26.2 dB ≥ 24.3 dB ≥ 18.0 dB ≥ 15.3 dB ≥ 12.5 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz 1.750 MHz – 2.150 MHz 2.150 MHz – 3.000 MHz	IEC 61169-1
Return Loss Gated of B039-FM	30 dB 27 dB 25 dB 20 dB 19 dB 14 dB	≥ 33.9 dB ≥ 30.2 dB ≥ 28.8 dB ≥ 23.1 dB ≥ 22.5 dB ≥ 17.1 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz 1.750 MHz – 2.150 MHz 2.150 MHz – 3.000 MHz	IEC 61169-1
Insertion Loss of Assembly	0.15 dB 0.20 dB 0.21 dB 0.31 dB 0.37 dB 0.50 dB	≤ 0.12 dB ≤ 0.17 dB ≤ 0.18 dB ≤ 0.28 dB ≤ 0.34 dB ≤ 0.47 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz 1.750 MHz – 2.150 MHz 2.150 MHz – 3.000 MHz	
Shielding Effectiveness (Measured with CoMeT)	Transfer Impedance @ 5 – 30 MHz ≤ 0.15 mΩ/item Screening Attenuation @ 30 – 1.000 MHz ≥ 121.8 dB Screening Attenuation @ 1.000 – 2.000 MHz ≥ 122.9 dB Screening Attenuation @ 2.000 – 3.000 MHz ≥ 110.1 dB Class: A++			IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
Common Path Distortion	≤ -110 dBc			ANSI/SCTE 109 2005
Inner Conductor Resistance	≤ 2.0 mΩ @ 1 A DC.			IEC 61169-1
Amp. Rating	≤ 4 A @ 60 V.			
Dielectric Strength	≥ 2 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
Corrosion Protection		ASTM B 117-94

### Mechanical

	Specification	Standard
Interface	F male	IEC 61169-24
Cable Retention	≥ 75 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	
Insulator	Polycarbonate/ Teflon	

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:

Nm-Ff, **B039-FM** – Cable – **B039-FM**, Nm-Ff

All measurements are done with Bedea Telass B75 1,1/7,3 cable, length 0.8 meter.

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

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

Return Loss, Insertion Loss and Shielding 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 ( $\geq 4$  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.

