



Description: Hardline Connector, B004 to F-male.  
(Measured with DRAKA COAX6 AT16A 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	23 dB	≥ 26.5 dB	IEC 61169-1
	23 dB	≥ 26.5 dB	
	23 dB	≥ 26.4 dB	
	22 dB	≥ 25.1 dB	
	22 dB	≥ 25.5 dB	
Return Loss Gated of B004-FM	15 dB	≥ 18.8 dB	IEC 61169-1
	31 dB	≥ 34.8 dB	
	29 dB	≥ 32.9 dB	
	29 dB	≥ 32.5 dB	
	29 dB	≥ 32.2 dB	
Insertion Loss of Assembly	27 dB	≥ 30.4 dB	IEC 61169-1
	21 dB	≥ 24.3 dB	
	0.16 dB	≤ 0.13 dB	
	0.20 dB	≤ 0.17 dB	
	0.22 dB	≤ 0.19 dB	
Shielding Effectiveness of B004-FM (Measured with CoMeT)	0.30 dB	≤ 0.27 dB	IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
	0.33 dB	≤ 0.30 dB	
	0.38 dB	≤ 0.35 dB	
	Transfer Impedance @ 5 – 30 MHz ≤ 0.18 mΩ/item		
	Screening Attenuation @ 30 – 1.000 MHz ≥ 119.0 dB		
Common Path Distortion	≤ -110 dBc		ANSI/SCTE 109 2005
Inner Conductor Resistance	≤ 2.5 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	IEC 61169-24
Cable Retention	≥ 50 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, **B004-FM** – Cable – **B004-FM**, Nm-Ff.

All measurements are done with Draka coax6 AT16 A cable, length 1.0 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.

