



Description: Hardline Connector, B004 – F female, Chassis mount.
(Measured with DRAKA COAX 6 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	23 dB	≥ 26.8 dB	5 MHz – 500 MHz	IEC 61169-1
	23 dB	≥ 27.6 dB	500 MHz – 860 MHz	
	23 dB	≥ 26.1 dB	860 MHz – 1.000 MHz	
	21 dB	≥ 24.2 dB	1.000 MHz – 1.750 MHz	
	21 dB	≥ 24.7 dB	1.750 MHz – 2.150 MHz	
Insertion Loss of assembly	0.20 dB	≤ 0.17 dB	5 MHz – 500 MHz	
	0.26 dB	≤ 0.23 dB	500 MHz – 860 MHz	
	0.29 dB	≤ 0.26 dB	860 MHz – 1.000 MHz	
	0.38 dB	≤ 0.35 dB	1.000 MHz – 1.750 MHz	
	0.39 dB	≤ 0.36 dB	1.750 MHz – 2.150 MHz	
Shielding Effectiveness of assembly (Measured with CoMeT)			2.150 MHz – 3.000 MHz	IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
	Transfer Impedance @ 5 – 30 MHz ≤ 1.48 mΩ/item			
	Screening Attenuation @ 30 – 1.000 MHz ≥ 109.3 dB			
	Screening Attenuation @ 1.000 – 2.000 MHz ≥ 106.2 dB			
	Screening Attenuation @ 2.000 – 3.000 MHz ≥ 95.0 dB			
Shielding Effectiveness of Connector	Class: A++			EN 50117
Common Path Distortion	≤ -110 dBc			ANSI/SCTE 109 2005
Inner Conductor Resistance	≤ 10 mΩ @ 1 A DC.			IEC 61169-1
Amp. Rating	≤ 4 A @ 60 V.			
Dielectric Strength	≥ 2 KV.			IEC 61169-1
Insulation Resistance	≥ 29.99 MΩ @ 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	F female	IEC 61169-24
Pull Strength	≥ 75 kgf	ANSI/SCTE 99

Material and Finish

	Specification	Standard
Housing	NiSn (NITIN) plated Brass	ASTM B605
Inner conductor	NiSn (NITIN) plated Brass & Au (Gold) plated Brass	ASTM B605
Compression ring	NiSn (NITIN) plated Brass	ASTM B605
O'ring	EPDM	
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:

Nm-Fm, **B004-FF-C-S** – 50 cm. cable – **B004-FF-C-S**, Nm Fm.

All measurements are done with B004-FF-C mounted on DRAKA COAX 6 cable, length 50 cm. According to Data Sheet of the cable, screening class is better than class: A.

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 (≥ 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.

Insertion Force & Withdrawal Force of center conductor of
B004-FF-C-S
According to Standard: IEC 61169-24

Test	1	2	3	4	5	6	
Gauge	0,635	0,850	1,136	0,635	1,136	0,635	mm
Connector #1							
Insert	4,798	14,508	19,138	3,045	17,342	2,708	N
Pull Out	0,903	1,957	6,046	0,871	6,794	0,668	N
Connector #2							
Insert	3,780	10,479	19,447	2,535	16,677	2,286	N
Pull Out	0,874	1,642	6,172	0,817	6,430	0,714	N
Connector #3							
Insert	5,988	13,203	19,308	3,537	18,247	2,757	N
Pull Out	1,528	1,900	6,380	1,009	6,610	0,923	N
Connector #4							
Insert	3,301	10,860	17,442	3,179	17,676	2,430	N
Pull Out	1,185	2,312	6,332	1,013	6,576	0,805	N
Connector #5							
Insert	5,737	10,731	19,735	3,225	17,425	2,987	N
Pull Out	1,155	1,981	7,428	0,927	6,732	0,926	N