



Description: Hardline Connector, G009 – F female.
(Measured with Commscope CA 516 J 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	25 dB 21 dB 19 dB 18 dB	\geq 28.3 dB \geq 24.1 dB \geq 22.4 dB \geq 21.9 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz IEC 61169-1, 9.2.1.4
Gated Return Loss of G009-FF	29 dB 25 dB 24 dB 23 dB	\geq 32.8 dB \geq 28.6 dB \geq 27.9 dB \geq 26.9 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz IEC 61169-1, 9.2.1.4
Insertion Loss	0.11 dB 0.13 dB 0.14 dB 0.17 dB	\leq 0.08 dB \leq 0.10 dB \leq 0.11 dB \leq 0.14 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz
Shielding Effectiveness of assembly (Measured with CoMet)	Transfer Impedance @ 5 – 30 MHz \leq 0.8 m Ω /item Screening Attenuation @ 30 – 1.000 MHz \geq 99.1 dB Screening Attenuation @ 1.000 – 2.000 MHz \geq 91.1 dB Screening Attenuation @ 2.000 – 3.000 MHz \geq 82.4 dB Class: A+		IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
Screening Class of connector	Class A++		EN 50117
Common Path Distortion	\leq -110 dBc		ANSI/SCTE 109 2005
Amp. Rating	\leq 4 A.		
Dielectric Strength	\geq 2 KV.		IEC 61169-1, 9.2.1.6
Insulation Resistance	\geq 29.99 G Ω @ 500 V.		IEC 61169-1, 9.2.1.5

Environmental

	Specification	Standard
Temperature range Operating	-40°C to +85°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	\geq 125 kgf	ANSI/SCTE 99

Material and Finish

	Specification	Standard
Housing	NiSn (NITIN) plated Brass	ASTM B605
Inner conductor	NiSn (NITIN) plated Tinbronze	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:

G009-F female – Cable – G009-F female.

All measurements are done with Commscope CA 516 J cable, length 0.5 meter.

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

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

Return Loss, Gated Return Loss (Time Domain Measurement of Return Loss of 1 connector in setup), Insertion Loss and Shielding are measured with hp Network Analyzer hp 8753D and S-Parameter Test Set 85047A, 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 will cause damage of the insulator, and / or the cable.

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

