



Description: Hardline Connector, E019-F male.
(Measured with Belden Coax 4 F14 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	27 dB	≥ 30.7 dB	5 MHz – 500 MHz	IEC 61169-1
	25 dB	≥ 28.1 dB	500 MHz – 860 MHz	
	22 dB	≥ 25.4 dB	860 MHz – 1.000 MHz	
	20 dB	≥ 23.1 dB	1.000 MHz – 1.750 MHz	
	19 dB	≥ 22.5 dB	1.750 MHz – 2.150 MHz	
	17 dB	≥ 20.2 dB	2.150 MHz – 3.000 MHz	
Return Loss Gated of E019-FM	34 dB	≥ 37.0 dB	5 MHz – 500 MHz	IEC 61169-1
	31 dB	≥ 34.1 dB	500 MHz – 860 MHz	
	30 dB	≥ 33.2 dB	860 MHz – 1.000 MHz	
	28 dB	≥ 31.9 dB	1.000 MHz – 1.750 MHz	
	28 dB	≥ 32.5 dB	1.750 MHz – 2.150 MHz	
	25 dB	≥ 28.2 dB	2.150 MHz – 3.000 MHz	
Insertion Loss of Assembly	0.04 dB	≤ 0.01 dB	5 MHz – 500 MHz	
	0.07 dB	≤ 0.04 dB	500 MHz – 860 MHz	
	0.08 dB	≤ 0.05 dB	860 MHz – 1.000 MHz	
	0.13 dB	≤ 0.10 dB	1.000 MHz – 1.750 MHz	
	0.15 dB	≤ 0.12 dB	1.750 MHz – 2.150 MHz	
	0.21 dB	≤ 0.18 dB	2.150 MHz – 3.000 MHz	
Shielding Effectiveness of assembly (Measured with CoMet)	Transfer Impedance @ 5 – 30 MHz		≤ 1.63 mΩ/item	IEC 62153-4-3
	Screening Attenuation @ 30 – 1.000 MHz		≥ 122.4 dB	IEC 62153-4-4
	Screening Attenuation @ 1.000 – 2.000 MHz		≥ 124.3 dB	IEC 62153-4-4
	Screening Attenuation @ 2.000 – 3.000 MHz		≥ 121.6 dB	IEC 62153-4-4 EN 50117
Common Path Distortion	≤ -110 dBc		ANSI/SCTE 109 2005	
Inner Conductor Resistance	≤ 1.5 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	F male	IEC 61169-24
Cable Retention	≥ 90 kgf	ANSI/SCTE 99

Material and Finish

	Specification	Standard
Housing	NiSn (NITIN) plated Brass	ASTM B605
Inner conductor	NiSn (NITIN) plated Brass	ASTM B605
O'ring	EPDM	
Insulator	Teflon, PVC	

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 - **E019-FM** – Cable – **E019-FM** – Nm-Ff

All measurements are done with Belden (Pope) Coax 4 F14 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 (≥ 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.

