



Description: Hardline Connector, A025 – F male.  
(Measured with PPC Perfect Flex P6QVRM Cable)

## DATA SHEET

### Electrical

	Specification			Standard
Frequency Range	5 MHz – 3.000 MHz			
Impedance	75 $\Omega$ nominal			
	Better Than	Measured – Worst case of 5 measurements		
Return Loss Gated of A025-FM	34 dB	$\geq 37.2$ dB	5 MHz – 500 MHz	IEC 61169-1
	34 dB	$\geq 37.0$ dB	500 MHz – 860 MHz	
	33 dB	$\geq 36.4$ dB	860 MHz – 1.000 MHz	
	29 dB	$\geq 32.5$ dB	1.000 MHz – 1.750 MHz	
	27 dB	$\geq 30.7$ dB	1.750 MHz – 2.150 MHz	
	25 dB	$\geq 28.0$ dB	2.150 MHz – 3.000 MHz	
Return Loss of assembly	23 dB	$\geq 26.3$ dB	5 MHz – 500 MHz	IEC 61169-1
	22 dB	$\geq 25.5$ dB	500 MHz – 860 MHz	
	22 dB	$\geq 27.7$ dB	860 MHz – 1.000 MHz	
	20 dB	$\geq 23.0$ dB	1.000 MHz – 1.750 MHz	
	17 dB	$\geq 20.0$ dB	1.750 MHz – 2.150 MHz	
Insertion Loss of Assembly	13 dB	$\geq 16.2$ dB	2.150 MHz – 3.000 MHz	
	0.11 dB	$\leq 0.08$ dB	5 MHz – 500 MHz	
	0.23 dB	$\leq 0.20$ dB	500 MHz – 860 MHz	
	0.29 dB	$\leq 0.26$ dB	860 MHz – 1.000 MHz	
	0.33 dB	$\leq 0.30$ dB	1.000 MHz – 1.750 MHz	
Shielding Effectiveness of A025-FM (Measured with CoMeT)	0.51 dB	$\leq 0.48$ dB	1.750 MHz – 2.150 MHz	IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
	0.62 dB	$\leq 0.59$ dB	2.150 MHz – 3.000 MHz	
	Transfer Impedance @ 5 – 30 MHz		$\leq 0.69$ m $\Omega$ /item	
	Screening Attenuation @ 30 – 1.000 MHz		$\geq 107.3$ dB	
	Screening Attenuation @ 1.000 – 2.000 MHz		$\geq 95.6$ dB	
Screening Attenuation @ 2.000 – 3.000 MHz		$\geq 85.6$ dB		
Common Path Distortion	$\leq -110$ dBc		ANSI/SCTE 109 2005	
Inner Conductor Resistance	$\leq 10$ m $\Omega$ @ 1 A DC.		IEC 61169-1	
Amp. Rating	$\leq 4$ A @ 60 V.			
Dielectric Strength	$\geq 2$ kV.		IEC 61169-1	
Insulation Resistance	$\geq 29.99$ G $\Omega$ @ 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	$\geq 15$ kgf	ANSI/SCTE 99

### Material and Finish

	Specification	Standard
Housing	NiSn (NITIN) plated Brass	ASTM B605
Inner conductor	NiSn (NITIN) plated Tinbronze	ASTM B605
O'ring	EPDM	
Insulator	Teflon & 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-Ff, **A025-FM** – Cable – **A025-FM**, Nm-Ff.

All measurements are done with PPC Perfect Flex P6QVRM 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.

