



Description: Hardline Connector, M054 to F-male.
(Measured with Alcatel ACW4PTC 860 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	29 dB 27 dB 27 dB 27 dB 26 dB 20 dB	\geq 32.2 dB \geq 30.1 dB \geq 30.2 dB \geq 30.1 dB \geq 29.3 dB \geq 23.2 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz 1.750 MHz – 2.150 MHz 2.150 MHz – 3.000 MHz IEC 61169-1
Return Loss Gated of M054-FM	34 dB 34 dB 34 dB 34 dB 33 dB 26 dB	\geq 37.8 dB \geq 37.8 dB \geq 38.0 dB \geq 38.1 dB \geq 36.3 dB \geq 29.4 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz 1.750 MHz – 2.150 MHz 2.150 MHz – 3.000 MHz IEC 61169-1
Insertion Loss of Assembly	0.08 dB 0.10 dB 0.11 dB 0.15 dB 0.17 dB 0.21 dB	\leq 0.05 dB \leq 0.07 dB \leq 0.08 dB \leq 0.12 dB \leq 0.14 dB \leq 0.18 dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz 1.750 MHz – 2.150 MHz 2.150 MHz – 3.000 MHz
Shielding Effectiveness of assembly (Measured with CoMet)	Transfer Impedance @ 5 – 30 MHz \leq 0.14 m Ω /m Screening Attenuation @ 30 – 1.000 MHz \geq 120.6 dB Screening Attenuation @ 1.000 – 2.000 MHz \geq 116.1 dB Screening Attenuation @ 2.000 – 3.000 MHz \geq 113.8 dB Class: A++		IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
Common Path Distortion	\leq -110 dBc		ANSI/SCTE 109 2005
Inner Conductor Resistance	\leq 1.8 m Ω @ 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 Ω @ 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	\geq 140 kgf	ANSI/SCTE 99
Approved compression tool	Cablematic JCST860QR	

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, **M054-FM** – Cable – **M054-FM**, Nm-Ff.

All measurements are done with Alcatel ACW4PTC 860 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 (≥ 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.

