



Description: Adaptor, 3.5/12 male – F female.

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	35 dB 31 dB 29 dB 25 dB 25 dB 25 dB	≥ 38.8 dB ≥ 34.3 dB ≥ 32.9 dB ≥ 28.5 dB ≥ 28.2 dB ≥ 29.8 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	0.09 dB 0.11 dB 0.12 dB 0.17 dB 0.17 dB 0.17 dB	≤ 0.06 dB ≤ 0.08 dB ≤ 0.09 dB ≤ 0.14 dB ≤ 0.14 dB ≤ 0.14 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 (Measured with CoMeT)	Transfer Impedance @ 5 – 30 MHz ≤ 0.50 mΩ/item Screening Attenuation @ 30 – 1.000 MHz ≥ 112.0 dB Screening Attenuation @ 1.000 – 2.000 MHz ≥ 110.2 dB Screening Attenuation @ 2.000 – 3.000 MHz ≥ 107.9 dB Class: A++		IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
Common Path Distortion	≤ -110 dBc		ANSI/SCTE 109 2005
Amp. Rating	≥ 4 A @ 60 V.		
Dielectric Strength	≥ 2 KV.		IEC 61169-1
Insulation Resistance	≥ 29.99 GΩ @ 500 V.		IEC 61169-1

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	3.5/12 F	IEC 61169-14 IEC 61169-24

Material and Finish

	Specification	Standard
Housing	NiSn (NITIN) plated Brass	ASTM B605
Inner conductor	NiSn (NITIN) plated Brass & Gold (Au) 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-58f, 58m-3512f, **3512M-FF-S**, Nm-Fm.

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.

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

Insertion Force & Withdrawal Force of center conductor of F female on
3512M-FF-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	4,343	10,174	19,128	2,659	18,118	2,652	N
Pull Out	0,981	1,822	6,600	1,121	6,060	0,751	N
Connector #2							
Insert	5,002	11,937	18,805	4,050	17,247	3,333	N
Pull Out	1,134	2,467	7,479	1,269	6,544	1,172	N
Connector #3							
Insert	3,610	11,092	18,117	2,924	15,952	2,923	N
Pull Out	0,901	1,797	6,332	0,797	6,122	0,685	N
Connector #4							
Insert	4,121	17,780	19,539	2,480	16,976	3,537	N
Pull Out	0,853	3,081	6,351	0,686	6,030	0,795	N
Connector #5							
Insert	4,245	13,309	19,589	3,724	17,601	3,356	N
Pull Out	1,035	2,341	5,787	0,909	5,955	0,915	N