

# FILTER PIN

# EMI FILTERS "PI" TYPE

## GENERAL SPECIFICATIONS

Capacitance / Tolerance:	Measured @ 1 KHz and .1-1 Vrms, 25°C / -0% +100%
Dissipation Factor:	2.5% max @ 1 KHz and .1-1 Vrms, 25°C
Insulation Resistance:	10 <sup>3</sup> MΩ or 1000 MΩ - mF, whichever is less @ 25°C, WVDC
Working Voltage:	50 VDC to 300 VDC
Dielectric Withstanding Voltage:	250 % of WVDC min. @ 25°C for 5±1 sec, 50 mA max chg. Current
Volt-Temperature Limit:	+10% -30% @ WVDC and -55°C to +125°C
Current Rating:	10 Amp
DC Resistance:	.005Ω max.
Insertion Loss:	Measured per Mil-STD-220, IL between any two adjacent specified frequency shall be that of the lower of the two frequencies in order to accommodate resonant dips.
Operating Temperature:	-55°C to +125°C
Storage Temperature:	-65°C to +150°C
Materials: Case	Brass, ½ hard per QQ-B-626 (composition #22)
Terminals	Copper per ASTM B-170 / phosphor-bronze optional
Finish: Case	Silver per QQ-S-365 / Gold Optional
Terminals	Silver per QQ-S-365 / Gold Optional
Applicable MIL Specifications:	Mil-F-15733
Environmental Test Spec:	Mil-STD-202
Thermal Shock:	Method 107, Condition A except step 3 @ 125°C
Salt Spray:	Method 101, Condition B
Barometric Pressure:	Method 105, Condition B
Resistance to Soldering Heat:	Method 210, Condition B
Seal:	Not Applicable
Vibration:	Method 204, Condition D
Shock:	Method 213, Condition I
Terminal Strength:	Method 211, Condition A
Solderability:	Method 208
Life:	Method 108, Condition D

## INSTALLATION GUIDE

In order to reduce the possibility of damage as a result of thermal stress caused by the application of soldering heat, adhere to following procedure:

- 1) Preheat the part and the chassis to 125-140°C for 5 minutes.
- 2) Use silver bearing solder preforms such as 60/38/2 % tin/lead/silver or 60/40 % tin/lead.
- 3) Apply the heat in the immediate vicinity of the filter with sufficient magnitude to reflow the solder preform and only for the minimum time required to make a good solder connection.
- 4) Allow the assembly to cool at the rate similar to that of the preheat operation.
- 5) Avoid bending or flexing terminals at the point of exit from the glass or epoxy seal to preserve the integrity of the seal and/or ceramic capacitor.
- 6) Solder connections to the terminals should be performed with temperatures not exceeding 230°C, placing a heat sink between soldering point and filter body whenever possible.