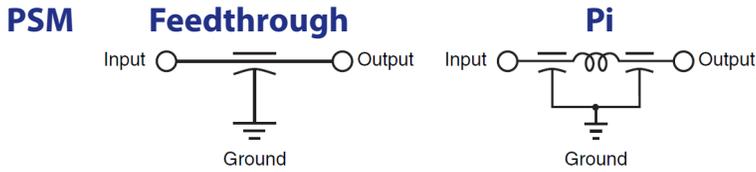
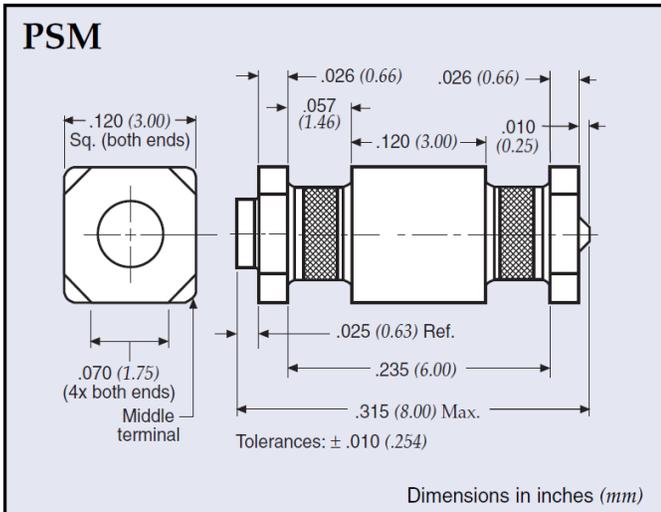


# Surface Mount Low Pass Filters

## PSM Series

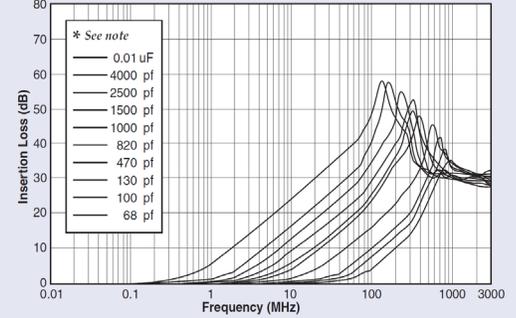


Voltage Rating DC	200 VDC @ -55°C to +125°C
DWV	700 VDC
Current Rating	20 Amps (Feedthrough) max. 10 Amps (Pi) max.
Insulation Resistance	1.0 GΩ @ 25°C
Dissipation Factor	4.0% maximum
D.C.R	Max. .0005Ω, typ. .0002Ω

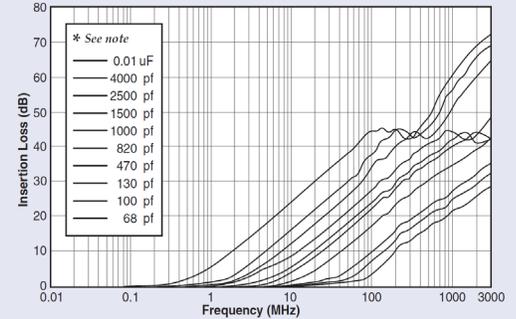


### Feedthrough Insertion Loss

#### Typical SMT Applications



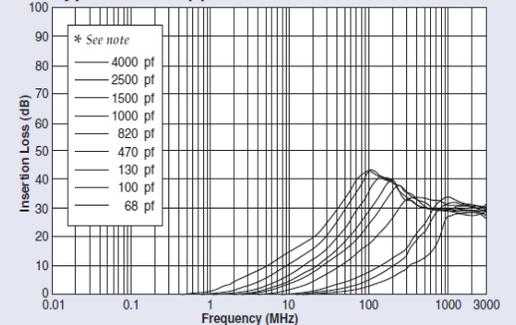
#### Shielded or Partition Applications



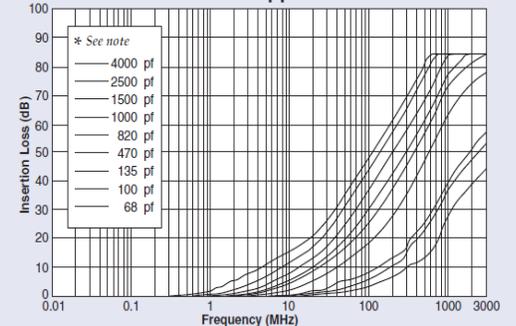
\* Capacitance values for insertion loss curves are displayed left to right in the order shown.

### Pi Insertion Loss

#### Typical SMT Applications



#### Shielded or Partition Applications



# Surface Mount Low Pass Filters

PSM Series

## PSM Ordering Information Example: PSM4-402Z-20T0

<b>PSM</b>	<b>4</b>	-	<b>402Z</b>	-	<b>20</b>	<b>T</b>	<b>0</b>																																	
Style	Circuit Configuration		Capacitance		Current Rating	Packaging	Tape and Reel																																	
PSM (Power) † Also available through APITech's authorized distributors.	1 - Pi 4 - Feedthrough		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Code</th> <th>Value*</th> <th>Tolerance</th> </tr> </thead> <tbody> <tr><td>680M</td><td>68 pF</td><td>±20%</td></tr> <tr><td>101M</td><td>100 pF</td><td>±20%</td></tr> <tr><td>131P</td><td>130 pF</td><td>+100/-0%</td></tr> <tr><td>471P</td><td>470 pF</td><td>+100/-0%</td></tr> <tr><td>821M</td><td>820 pF</td><td>±20%</td></tr> <tr><td>102M</td><td>1000 pF</td><td>±20%</td></tr> <tr><td>152M</td><td>1500 pF</td><td>±20%</td></tr> <tr><td>252P</td><td>2500 pF</td><td>+100/-0%</td></tr> <tr><td>402Z</td><td>4000 pF</td><td>+80/20%</td></tr> <tr><td>103Z**</td><td>.01 µF</td><td>+80/-20%</td></tr> </tbody> </table>	Code	Value*	Tolerance	680M	68 pF	±20%	101M	100 pF	±20%	131P	130 pF	+100/-0%	471P	470 pF	+100/-0%	821M	820 pF	±20%	102M	1000 pF	±20%	152M	1500 pF	±20%	252P	2500 pF	+100/-0%	402Z	4000 pF	+80/20%	103Z**	.01 µF	+80/-20%		10 - 10 Amps (Pi) 20 - 20 Amps (Feedthrough)	T - Tape and reel packaging B - Bulk packaging	0 - 500 pieces 2 - 2,000 pieces <i>Note: Tape and reel packaging - 500 pieces (7") and 2,000 pieces (13")</i>
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### Technical Notes

- Soldering recommendations supplied upon request
- Reflow temperature limit is 250°C
- Unit weight is approximately 0.4 grams
- Tape and reel packaging available for automated assembly

### PSM Recommended Board Pattern

- Solder paste pattern
- Recommended pad, must be able to support continuous signal current

X = 0.350" minimum for 1 oz. copper (0.036 mm thickness)

X = 0.200" minimum for 2 oz. copper (0.071 mm thickness)

For low current (10 Amp or less)  
 X = 0.130" minimum for 1 oz. copper (0.036 mm thickness for 10 Amp and 0.5 oz. copper - 0.018 mm)

