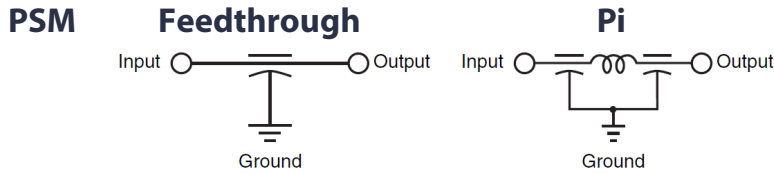
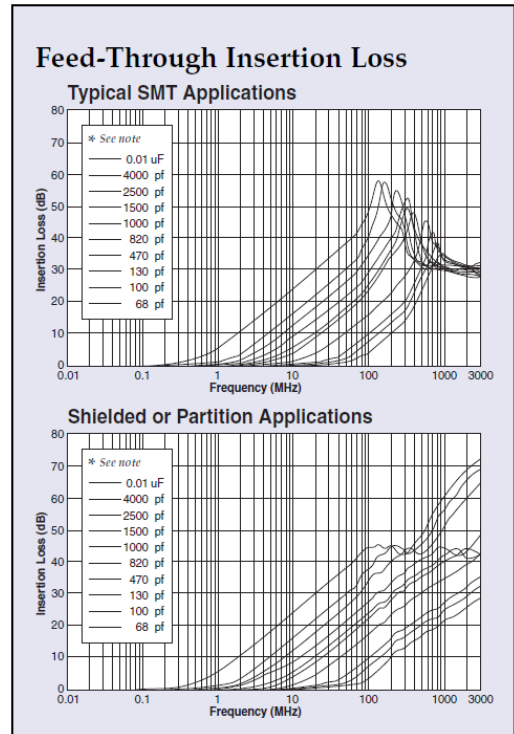
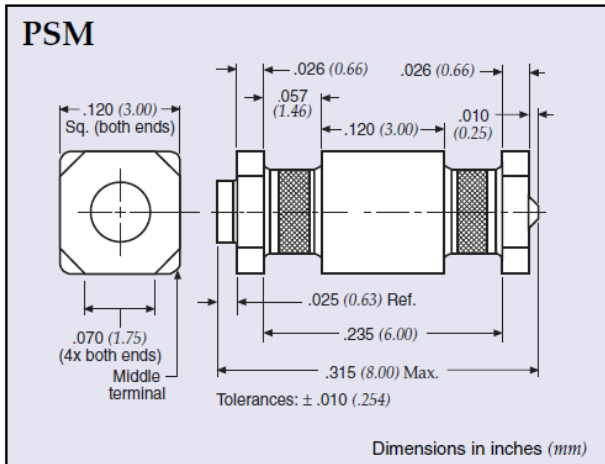


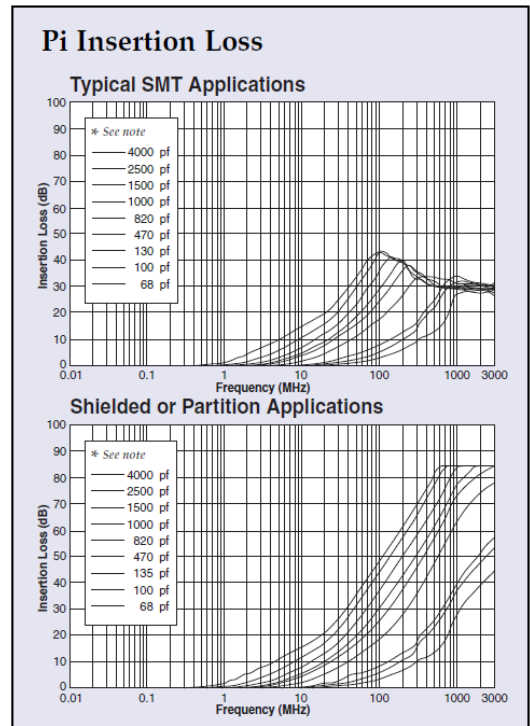
Power Surface Mount Filters



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



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



Power Surface Mount Filters

PSM Ordering Information

Example: PSM4-402Z-20T0

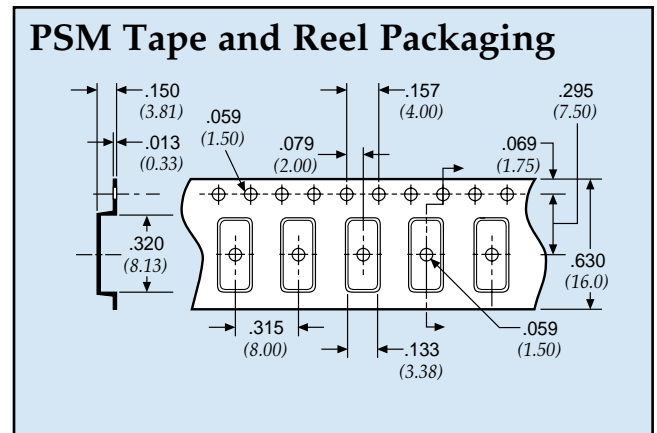
PSM	4	-	402Z	-	20	T	0
Style	Circuit Configuration		Capacitance		Current Rating	Packaging	Tape and Reel
PSM (Power)	1 - Pi 4 - Feedthrough				10 - 10 Amps (Pi) 20 - 20 Amps (Feedthrough)	T - Tape and reel packaging B - Bulk packaging	0 - 500 pieces 2 - 2,000 pieces <i>Note: Tape and reel packaging - 500 pieces (7") and 2,000 pieces (13")</i>

Code	Value*	Tolerance
680M	68 pF	±20%
101M	100 pF	±20%
102M	1000 pF	±20%
252P	2500 pF	+100/-0%
402Z	4000 pF	+80/20%
103Z**	.01 μF	+80/-20%

*Other capacitance values available as special order.
**Available in feedthrough circuit only.

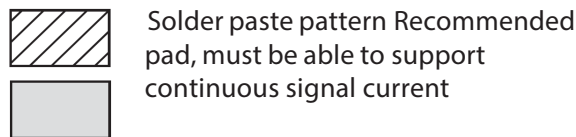
Technical Notes

- Soldering recommendations supplied upon request
- Reflow temperature limit is 260°C
- Unit weight is approximately 0.4 grams



Dimensions in inches (mm)

PSM Recommended Board Pattern



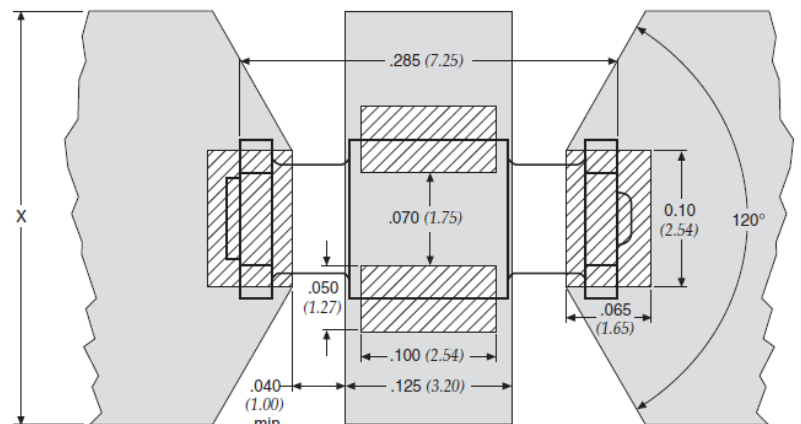
20 Amps Feedthrough

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

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

10 Amp Pi

X = 0.130" minimum for 1 oz. copper (0.036 mm thickness)



Dimensions in inches (mm)

Surface Mount Hi-Rel & Space EMI Filters

Expanded PSM series to include more stringent levels of testing by employing higher grade of dielectric materials to facilitate military and space applications.

Features

- Voltage rating from 200VDC/130 AC, 400 Hz, 700 DWV, -55 - 125°C
- Current rating
 - Feedthrough: 15 Amps max
 - Pi: 10 Amps max
- Capacitor TC=X7R (BR), DF 4% max.
- Integrates MIL-PRF-28861 design considerations
- Extended thermal shock and voltage conditioning
- Space-saving, compact design with secured ferrite (Pi circuits)
- Provides time and cost saving compared to through-hole filters



Hi-Rel



Space Grade

Applications

- Satellite systems
- Aircraft systems
- Defense systems
- Space ground transmitter receiver controllers
- Space applications
- Launch vehicles
- Ground communication & networks

Electrical Specifications

Typical Insertion Loss in a Shielded filter installation

Space Grade Pi Circuit

	130VAC/200VDC 10A max	Frequency (MHz)						
		Cap Value/Tol	10	30	50	100	300	500
PSM1SG-101M10T0	100 pF±20%	-	2	3	5	12	22	30
PSM1SG-102M10T0	1000 pF±20%	5	13	19	29	32	30	30
PSM1SG-152M10T0	1500 pF±20%	6	15	24	38	52	50	50
PSM1SG-252M10T0	2500 pF±20%	11	26	36	50	55	50	50

Hi-Rel C Circuit

	130VAC/200VDC 15A max	Frequency (MHz)						
		Cap Value/Tol	10	30	50	100	300	500
PSM4R-101M15T0	100 pF±20%	-	-	3	8	18	28	30
PSM4R-102M15T0	1000 pF±20%	3	11	15	23	30	32	30
PSM4R-152M15T0	1500 pF±20%	5	15	20	25	30	32	30
PSM4R-252M15T0	2500 pF±20%	9	19	22	28	32	32	40

Notes

Terminations: Hi-rel – silver finish; Space grade – gold finish
Other circuit component values available

