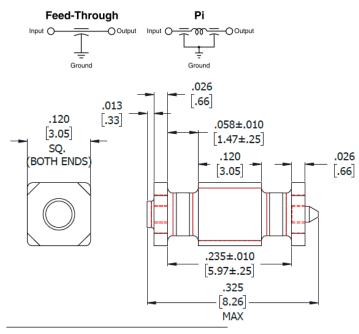# Surface Mount Hi-Rel & Space EMI Filters

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	1 GHz
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	1 GHz
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

*For space applications with outgassing requirements, SCI recommends applying a low outgassing conformal coating post-production.

Feed-Through

Input —|—O Output

Ground

Pi

Input —|—00—|—O Output

Ground

.026 [.66]
.013 [.33]
.120 [3.05] SQ. (BOTH ENDS)
.058±.010 [1.47±.25]
.120 [3.05]
.026 [.66]
.235±.010 [5.97±.25]
.325 [8.26] MAX