

SCPV - TEMPEST Shielded Room Enhanced Filters

Silicon CPV's TEMPEST Shielded Room filters have been designed for use within stringent TEMPEST environments and applications, for attenuation from 10KHz – 40GHz at 100dB.

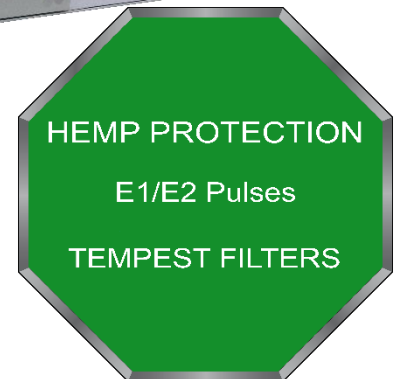
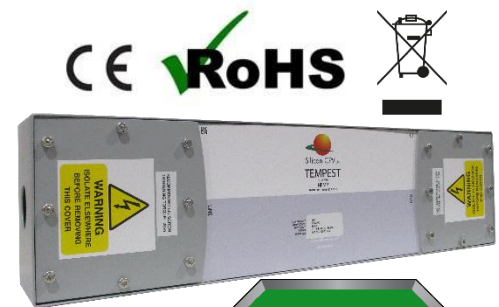
Shielded rooms require high levels of attenuation to ensure no conducted or radiated emissions are either imported or exported from the room.

Silicon CPV filters come in 2 or 4 wire options with current ratings of up to 250A per phase. The filters are manufactured in rugged steel enclosures, plated and painted, providing a robust filter solution.

Silicon CPV can also supply additional transient suppression option to the filters if required to give protection against induced transients from EMP sources.

Typical Applications, Technical and Commercial benefits

- Shielded rooms and enclosures
- Military and IT installations
- Computer rooms
- High current capability - compact size
- High common & differential mode insertion loss
- Improved low frequency performance
- Optional input transient suppression to suit unique applications
- Assists in compliance with prevailing EMC directives
- State of the art technology ensures superior performance
- Small size - Reduced weight - Simple mechanical and electrical installation
- Compliant with relevant BS, VDE, UL, CE & CSA safety standards
- Conforms to MIL-STD 220A and the electrical characteristics of Mil-F-15733
- EN 60939-2-2005 compliant
- Filters comply with basic requirements of the EMC directive 2014/30/EU
- RoHS compliant



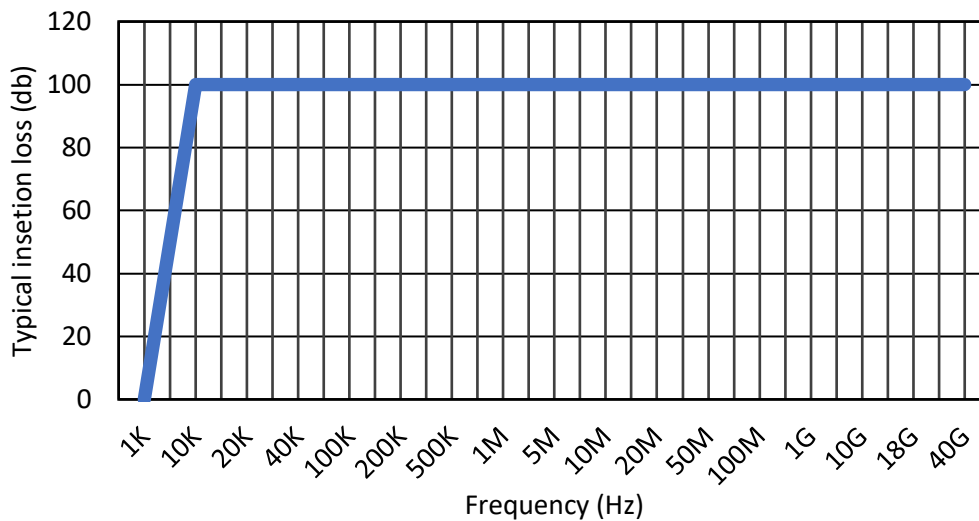
SCPV TEMPEST Model No	Current AC (A)	Voltage AC (V)	No of wires	Max AC (V)	Dimension L-W-H mm	Typical Earth Leakage mA (worst case)			Phase	Inductance per line (Typical) mH	Transient Energy Absorption (Typical)
						Std	LE	400Hz			
16A2SR-E	16	230	2	275	580,200,100	500	20	500	Single	5	75J opt
16A4SR-E	16	400	4	520	580,200,100	500	20	500	Three	5	75J opt
32A2SR-E	32	230	2	275	580,200,100	500	20	500	Single	3	75J opt
32A4SR-E	32	400	4	520	580,200,100	500	20	500	Three	3	75J opt
63A2SR-E	63	230	2	275	580,200,100	1K	40	1000	Single	2	75J opt
63A4SR-E	63	400	4	520	580,200,100	1K	40	1000	Three	2	75J opt
100A2SR-E	100	230	2	275	750,410,120	2K	40	2000	Single	0.7	150J opt
100A4SR-E	100	400	4	520	750,410,120	2K	40	2000	Three	0.7	150J opt
150A4SR-E	150	400	4	520	750,410,120	2K	40	4000	Three	0.3	150J opt
200A4SR-E	200	400	4	520	750,410,120	2K	40	4000	Three	0.3	200J opt
250A4SR-E	250	400	4	520	750,410,120	2K	40	4000	Three	0.3	200J opt

Ratings and Characteristics

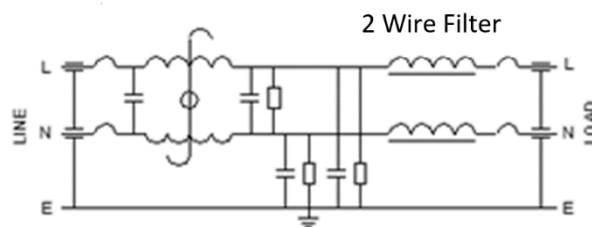
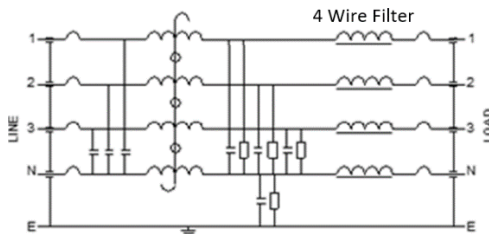
Storage Temp Range	-25°C to 85°C
Case material	Steel
Operating Temp Range	-20°C to 50°C
Termination Type	Bolt size
16A - 32A - 63A	M5 - M6 - M8
100A - 150A - 200A – 250A	M10 - M10 - M10 – M10
Conforms to	MIL-STD 220A Mil-F-15733

Max Temp Rise @ Full Load	<35°C
Max AC Volt Drop @ Full load	<2V/Line
Weight Kg (approx.)	2 wire 4 wire
16A	5 10
32A - 63A	9 10
100A - 150A	26 20
200A – 250A	29 30 - 35
Additional options – EMC Threaded bulkhead glands	Available on request

Performance Characteristics and Insertion Loss Curves



Schematics



Part No and Ordering Information

Order Part No	Product Description
SCPV – TEMPEST – 16A2SR-E	SCPV - TEMPEST Shielded Room 16A 2 Wire Enhanced Filter Single Phase
SCPV – TEMPEST – 16A4SR-E	SCPV - TEMPEST Shielded Room 16A 4 Wire Enhanced Filter Three Phase
SCPV – TEMPEST – 32A2SR-E	SCPV - TEMPEST Shielded Room 32A 2 Wire Enhanced Filter Single Phase
SCPV – TEMPEST – 32A4SR-E	SCPV - TEMPEST Shielded Room 32A 4 Wire Enhanced Filter Three Phase
SCPV – TEMPEST – 63A2SR-E	SCPV - TEMPEST Shielded Room 63A 2 Wire Enhanced Filter Single Phase
SCPV – TEMPEST – 63A4SR-E	SCPV - TEMPEST Shielded Room 63A 4 Wire Enhanced Filter Three Phase
SCPV – TEMPEST – 100A2SR-E	SCPV - TEMPEST Shielded Room 100A 2 Wire Enhanced Filter Single Phase
SCPV – TEMPEST – 100A4SR-E	SCPV - TEMPEST Shielded Room 100A 4 Wire Enhanced Filter Three Phase
SCPV – TEMPEST – 150A4SR-E	SCPV - TEMPEST Shielded Room 150A 4 Wire Enhanced Filter Three Phase
SCPV – TEMPEST – 200A4SR-E	SCPV - TEMPEST Shielded Room 200A 4 Wire Enhanced Filter Three Phase
SCPV – TEMPEST – 250A4SR-E	SCPV - TEMPEST Shielded Room 250A 4 Wire Enhanced Filter Three Phase