

# 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



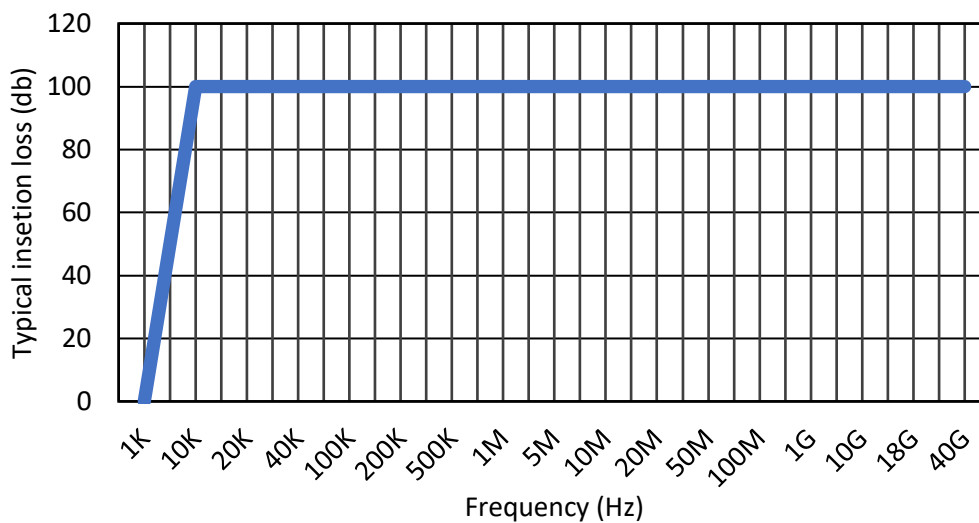
SCPV TEMPEST Model No	Current AC (A)	Voltage AC (V)	No of wires	Max AC (V)	Dimension L-W-H mm	Typical Earth Leakage mA (worst case)			Phase	Inductance per line (Typical) mH	Transient Energy Absorption (Typical)
						Std	LE	400Hz			
16A2SR-E	16	230	2	275	580,200,100	500	20	500	Single	5	75J opt
16A4SR-E	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

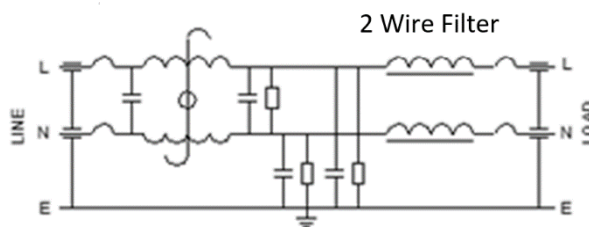
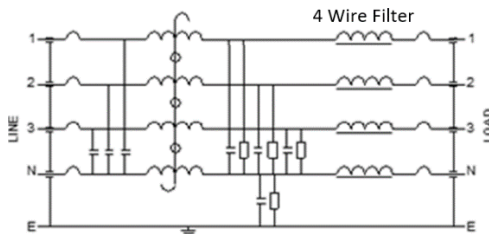
Storage Temp Range	-25°C to 85°C
Case material	Steel
Operating Temp Range	-20°C to 50°C
Termination Type	Bolt size
16A - 32A - 63A	M5 - M6 - M8
100A - 150A - 200A – 250A	M10 - M10 - M10 – M10
Conforms to	MIL-STD 220A Mil-F-15733

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