

SCPV - TEMPEST Shielded Room Filters

Silicon CPV's TEMPEST Shielded Room filters have been designed for use within stringent TEMPEST environments and applications, for attenuation from 14KHz – 18GHz 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 200A 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 2004/108/EC
- CE and RoHS compliant



Technical Specifications

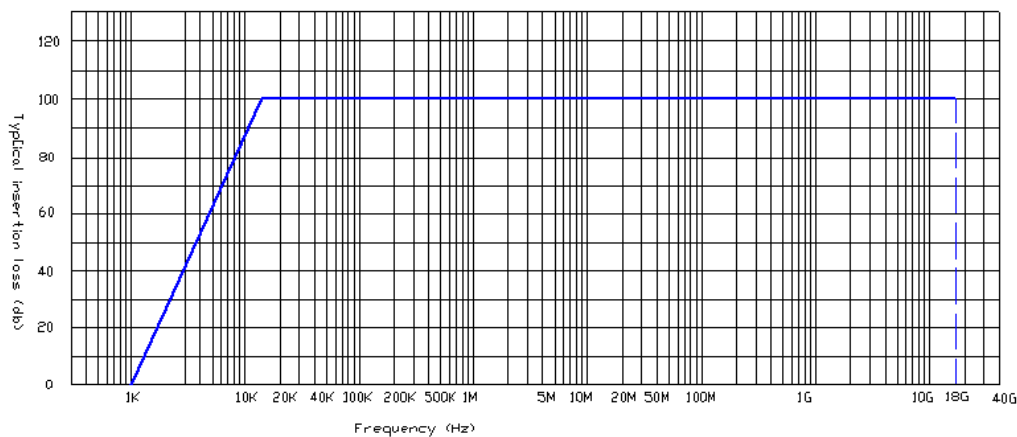
SCPV TEMPEST Model No	Current AC (A)	Voltage AC (V)	No of wires	Max AC (V)	Dimension W-H-D mm	Typical Earth Leakage mA (worst case)			Phase	Inductance per line (Typical) mH	Transient Energy Absorption (Typical)
						Std	LE	400Hz			
16A2SR	16	230	2	275	400,90,45	500	20	500	Single	5	75J opt
16A4SR	16	400	4	520	370,200,90	500	20	500	Three	5	75J opt
32A2SR	32	230	2	275	370,200,90	500	20	500	Single	3	75J opt
32A4SR	32	400	4	520	370,200,90	500	20	500	Three	3	75J opt
63A2SR	63	230	2	275	370,200,90	1K	40	1000	Single	2	75J opt
63A4SR	63	400	4	520	400,300,120	1K	40	1000	Three	2	75J opt
100A2SR	100	230	2	275	560,215,120	2K	40	2000	Single	0.7	150J opt
100A4SR	100	400	4	520	550,410,150	2K	40	2000	Three	0.7	150J opt
150A4SR	150	400	4	520	550,410,150	2K	40	4000	Three	0.3	150J opt
200A4SR	200	400	4	520	550,410,150	2K	40	4000	Three	0.3	200J opt

Ratings and Characteristics

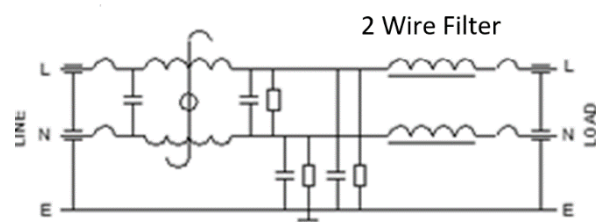
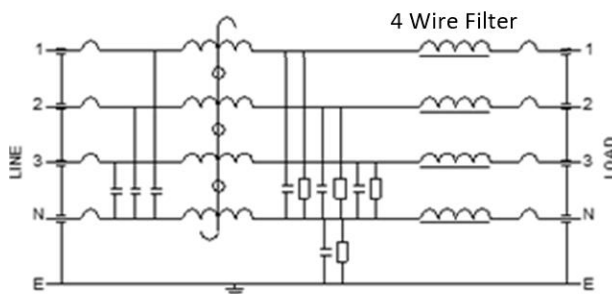
Storage Temp Range	-25°C to 85°C
Case material	Steel
Operating Temp Range	-20°C to 50°C
Termination Type	Bolt size
16A - 32A - 63A	M5 - M6 - M8
100A - 150A - 200A	M10 - M10 - M10
Conforms to	MIL-STD 220A Mil-F-15733

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	29	30
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	SCPV - TEMPEST Shielded Room 16A 2 Wire Filter Single Phase
SCPV – TEMPEST – 16A4SR	SCPV - TEMPEST Shielded Room 16A 4 Wire Filter Three Phase
SCPV – TEMPEST – 32A2SR	SCPV - TEMPEST Shielded Room 32A 2 Wire Filter Single Phase
SCPV – TEMPEST – 32A4SR	SCPV - TEMPEST Shielded Room 32A 4 Wire Filter Three Phase
SCPV – TEMPEST – 63A2SR	SCPV - TEMPEST Shielded Room 63A 2 Wire Filter Single Phase
SCPV – TEMPEST – 63A4SR	SCPV - TEMPEST Shielded Room 63A 4 Wire Filter Three Phase
SCPV – TEMPEST – 100A2SR	SCPV - TEMPEST Shielded Room 100A 2 Wire Filter Single Phase
SCPV – TEMPEST – 100A4SR	SCPV - TEMPEST Shielded Room 100A 4 Wire Filter Three Phase
SCPV – TEMPEST – 150A4SR	SCPV - TEMPEST Shielded Room 150A 4 Wire Filter Three Phase
SCPV – TEMPEST – 200A4SR	SCPV - TEMPEST Shielded Room 200A 4 Wire Filter Three Phase