

SCPV - TEMPEST – 100A - Low Leakage Shielded Room Filters with HEMP Protection

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.

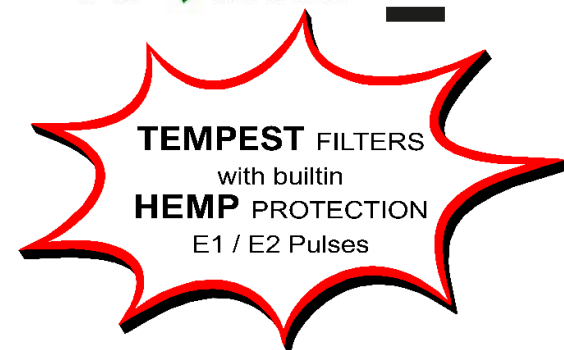
Shielded rooms require high levels of attenuation to ensure no conducted or radiated emissions are either imported or exported from the room. The filter has been designed for use within stringent TEMPEST environments and applications, where protection compliant to SDIP-29 and equipment hardening to SDIP-27 is required.

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.



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-15733-28 REV F:2003
- IEC 60939-2-2005/AMD1:2023 compliant
- Filters comply with basic requirements of the EMC directive 2014/30/EU
- RoHS compliant
- **HEMP Protection E1/ E2 pulses**



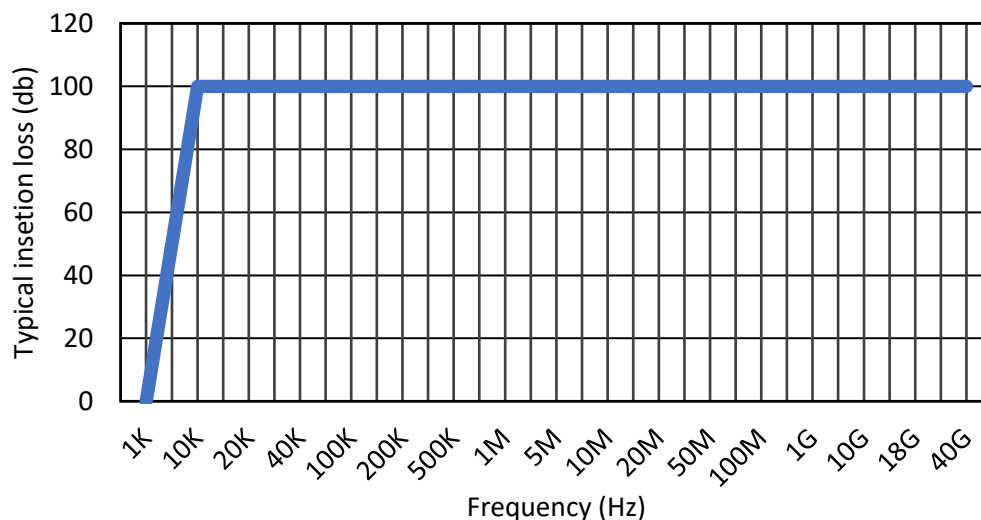
SCPV TEMPEST Model No	Current AC (A)	Voltage AC (V)	No of wires	Max AC (V)	Dimension L-W-H mm	Typical Earth Leakage mA per line @50/60Hz		Phase	Inductance per line (Typical) mH	Transient Energy Absorption (Typical)
						50Hz	60Hz			
100A2SRH	100	230	2	275	750,235,150	<3 mA	<4 mA	Single	0.7	150J opt
100A4SRH	100	400	4	520	750,235,150	<3 mA	<4 mA	Three	0.7	150J opt

Ratings and Characteristics

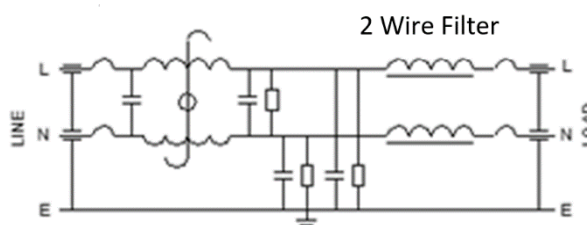
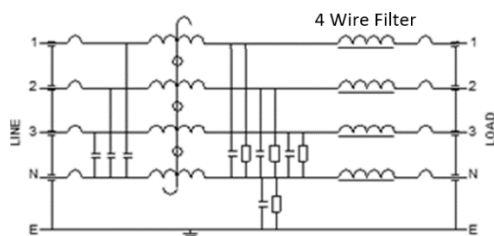
Storage Temp Range	-25°C to 85°C
Case material	Steel
Operating Temp Range	-20°C to 50°C
Termination Type 100A	Bolt size M10
Conforms to	MIL-STD 220A Mil-F-15733-28 REV F:2003

Max Temp Rise @Full Load	<35°C
Max AC Volt Drop @ Full load	<2V/Line
Weight Kg (approx.) 100A	2 wire 20 4 wire 26

Performance Characteristics and Insertion Loss Curves



Schematics



Part No and Ordering Information

Order Part No	Product Description
SCPVSHIELD100A2SRH	SCPV - TEMPEST Shielded Room 100A 2 Wire Filter Single Phase with HEMP Protection
SCPVSHIELD100A4SRH	SCPV - TEMPEST Shielded Room 100A 4 Wire Filter Three Phase with HEMP Protection