

SCPV - TEMPEST – 100A - Shielded Room 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.



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
- IEC 60939-2-2005/AMD1:2023 compliant
- Filters comply with basic requirements of the EMC directive 2014/30/EU
- RoHS compliant

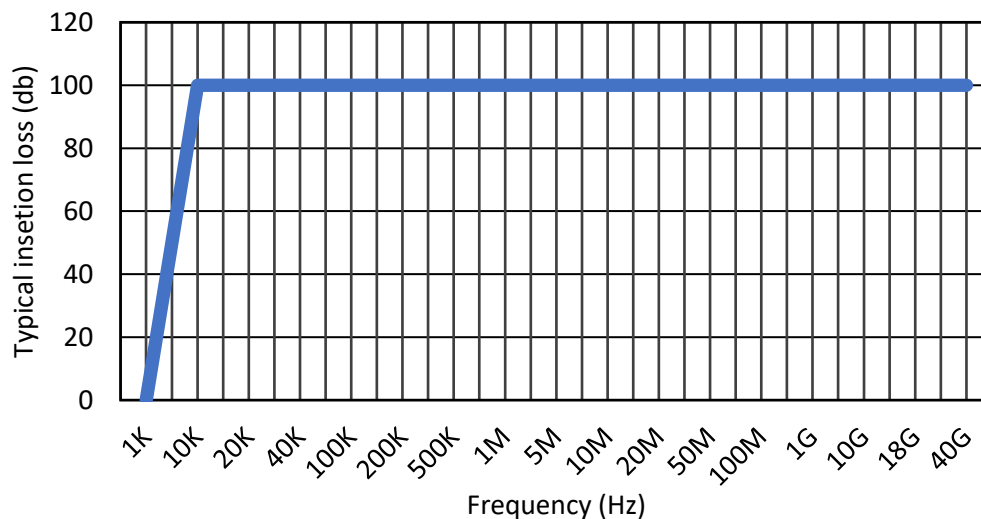
SCPV TEMPEST Model No	Current AC (A)	Voltage AC (V)	No of wires	Max AC (V)	Dimension L-W-H mm	Typical Earth Leakage mA (worst case)			Phase	Inductance per line (Typical) mH	Transient Energy Absorption (Typical)
						Std	LE	400Hz			
100A2SR	100	230	2	275	745,235,145	2K	40	2000	Single	0.7	150J opt
100A4SR	100	400	4	520	745,235,145	2K	40	2000	Three	0.7	150J opt

Ratings and Characteristics

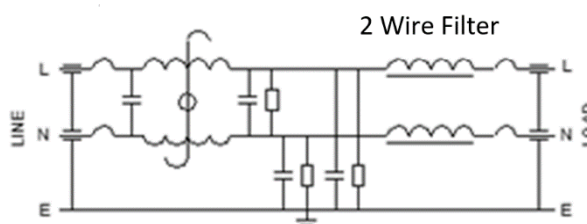
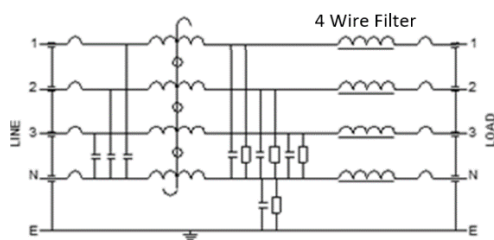
Storage Temp Range	-25°C to 85°C
Case material	Steel
Operating Temp Range	-20°C to 50°C
Termination Type 100A	Bolt size M10
Conforms to	MIL-STD 220A Mil-F-15733

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
SCPVSHIELD100A2SR	SCPV - TEMPEST Shielded Room 100A 2 Wire Filter Single Phase
SCPVSHIELD100A4SR	SCPV - TEMPEST Shielded Room 100A 4 Wire Filter Three Phase