

Specifications Per

• IEC 60115-1, IEC 60115-4

Features

- Advanced multi-functional design
- Cut-off on overload or accidental short circuit
- Transient withstanding for power-line coupling
- Flameproof multi-layer coating equivalent to UL 94 V-0
- Flameproof feature equivalent to overload test UL 1412
- Possible alternative to wire-wound resistors
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

DIMENSIONS

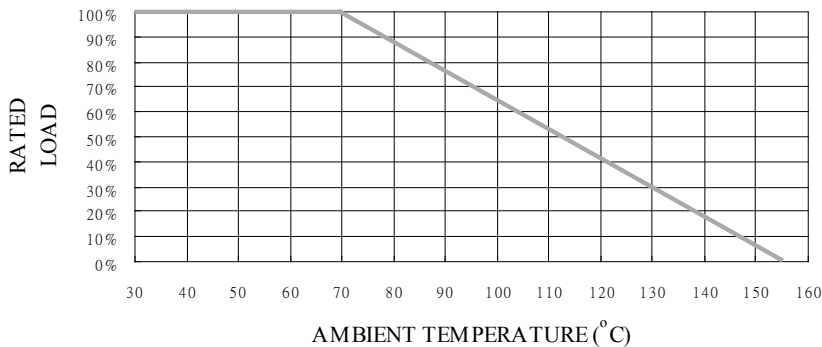
Type	Body Length (L, mm)	Body Diameter (D, mm)	Lead Wire Length (H, mm)	Lead Wire Diameter (d, mm)	Net Weight Per 1000 Pcs
SCP50	9.00 ± 1.0	3.2 ± 0.2	28 ± 3.0	0.6 ± 0.03	340 Grams
SCP101	9.00 ± 1.0	3.2 ± 0.2	28 ± 3.0	0.6 ± 0.03	340 Grams
SCP201	11.0 ± 1.0	4.0 ± 0.5	28 ± 3.0	0.8 ± 0.03	510 grams
SCP301	13.5 ± 1.0	5.0 ± 0.5	30 ± 3.0	0.8 ± 0.03	1050 grams

GENERAL SPECIFICATIONS

Type	Power Rating (at 70°C)	Maximum Working Voltage	Maximum Overload Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
SCP50	1/2W	350V	600V	2.2Ω	3.3KΩ	±5%	E-24
SCP101	1W	350V	700V	2.2Ω	3.3KΩ	±5%	E-24
SCP201	2W	350V	700V	2.2Ω	3.3KΩ	±5%	E-24
SCP301	3W	350V	700V	2.2Ω	10KΩ	±5%	E-24

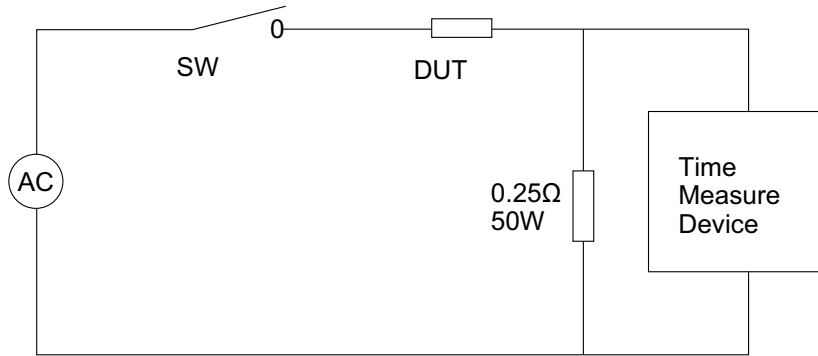
*Please contact us for resistance values, sizes, or specifications not listed.

POWER DERATING CURVE



■ FUSING TEST SCHEME

When the SW is closed, time measure device will start to count the fusing time, and the DUT (Device Under Test) will fuse without flame.



■ TECHNICAL SPECIFICATIONS

Characteristics		Limits	
Dielectric Withstanding Voltage, VAC or DC		SCP50/101 SCP201/301	350 700
Temperature Coefficient, PPM / °C*		Typically±400	
Operating Temperature Range, °C		-55 ~ +155	
Fusing Condition	SCP50	Interrupts in max. 60 seconds at 12W overload	
	SCP101	Interrupts in max. 60 seconds at 16W overload	
	SCP201	Interrupts in max. 60 seconds at 20W overload	
	SCP301	Interrupts in max. 60 seconds at 30W overload	
Insulation Resistance, MΩ		10 ⁴ Min.	

* Not applicable to all resistance values. Please check with us regarding the PPM of specific resistance value(s).

■ PART NUMBER

Example: SCP50J10K0TKZTB2K0

SCP50	J	10K0	TKZ	TB2K0
Type	Tolerance	Resistance	TCR	Packaging
	J (5%)	10KΩ 4-character code containing - 3 significant digits 1 letter multiplier <u>OHM MULTIPLIER</u> R = 1 K = 10 ³ M = 10 ⁶ G = 10 ⁹	3-character code TKZ = Default Product Temperature Coefficient. Information of typical product temperature coefficient can be found in the Technical Summary section of the datasheet.*	5-character code TB = Tape Box (pieces per box) <u>SCP50/SCP101</u> 2K0 = 2,000 <u>SCP201</u> 1K0 = 1,000 <u>SCP301</u> 500 = 500

* For the availabilities of non-default temperature coefficient, please check with us. Reference for TCR letter codes can be found in section (4) of Part Number Construction in the Appendices.

■ PERFORMANCE SPECIFICATIONS

Characteristics	Test Conditions	Limits
Short Time Overload	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±3%
Load Life In Humidity	IEC 60115-1 4.24 56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity	±5%
Load Life	IEC 60115-1 4.25.1 Rated load (not over max. working voltage) 1,000 hours with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C	±5%
Resistance To Soldering Heat	IEC 60115-1 4.18.2 Leads immersed till 3mm from the body in (260±5)°C solder for 10±1 seconds	±1%
Solderability	IEC 60115-1 4.17.2 Solder area covered after (235±3)°C/(2±0.2) seconds with flux applied	95% min.coverage
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz.	±0.5%
Thermal Endurance	IEC 60115-1 4.25.3 1000 hours at 155°C without load	±1%
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles	±2%