

High Power, Low Value, Open Air, Wirewound Radial Leaded Resistor



KEY BENEFITS

- All welded construction
- High power: up to 5 W at + 70 °C
- Low resistance value: 0.004 Ω to 0.05 Ω
- Very low inductance: less than 5 nH
- Device helps maintain low board temperature by keeping the resistive element away from the board

APPLICATIONS

- Current sensing
- Electronic motor starting
- Switching circuitry
- Automotive electronic controls
- Instrumentation
- Power supplies

RESOURCES

- Datasheet: SR - <http://www.vishay.com/doc?31067>
- For technical questions contact ww2aresistors@vishay.com



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FEATURES

- Open air design
- Low resistance values for all types of current sensing, voltage division and pulse applications including switching and linear supplies, instrumentation and power amplifiers
- All welded construction
- Solid metal nickel-chrome or copper-nickel alloy resistive element
- Solderable terminations
- Very low inductance
- AEC-Q200 qualified available ⁽¹⁾
- Compliant to RoHS Directive 2002/95/EC


Note

⁽¹⁾ Flame retardance test may not be applicable to some resistor technologies.

STANDARD ELECTRICAL SPECIFICATIONS

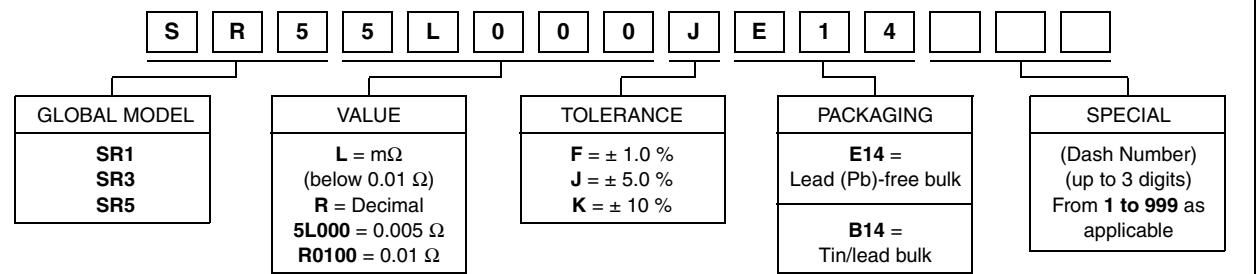
MODEL	POWER RATING $P_{70\text{ }^\circ\text{C}}$ W	TOLERANCE $\pm \%$	RESISTANCE RANGE Ω
SR1	1.0	1, 5	0.005 to 0.03
SR3	3.0	1, 5	0.005 to 0.05
SR5	5.0	1, 5	0.004 to 0.05

TECHNICAL SPECIFICATIONS

PARAMETER	UNIT	SR Resistor Characteristics
Temperature Coefficient	ppm/ $^\circ\text{C}$	0.004 Ω to 0.005 Ω = \pm 300 0.0051 Ω to 0.0099 Ω = \pm 175 0.01 Ω to 0.05 Ω = \pm 100
Operating Temperature Range	$^\circ\text{C}$	- 65 to + 275
Maximum Continuous Current	A	$(P/R)^{1/2}$

GLOBAL PART NUMBER INFORMATION

Global Part Numbering Example: SR55L000JE14



Revision 18-Nov-10

Resistors - Maintains Low Board Temperature