Fast Acting, Molded Styles, Custom Designed For Your Application

FEATURES

- Low temperature coefficient (down to 30 ppm/°C)
- High temperature silicone molded package (derated to 200 °C)
- Performs function of resistor and series fuse and provides predictable fusing times
- Complete welded construction
- No flaming or distortion of unit under sufficient fusing conditions (contact factory for details)
- Ideal for squib circuit applications and protection of semi-conductor devices
- Negligible noise and voltage coefficient
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb Available

TYPICAL ELECTRICAL SPECIFICATIONS

The following are offered as examples of reliable designs. Hundreds of possible combinations are available for meeting your requirements. Contact factory by using email address in the footer of this page, for assistance. Higher wattages available.

GLOBAL MODEL	HISTORICAL MODEL	FUSING PARAMETERS		RESISTANCE RANGE Ω	TOLERANCE ± %	1.0 W CONTINUOUS POWER (1)	
		FUSING CURRENT A	TYPICAL FUSING TIME ms			CONTINUOUS CURRENT A	CROSSOVER VALUE Ω
RS01A...209	RS-1A-209	0.5	4	49 to 500	5, 10	0.10	100.0
RS01A...118	RS-1A-118	1.0	9	6.8 to 185	5, 10	0.25	16.0
RS01A...212	RS-1A-212	1.25	8	4.7 to 107	5, 10	0.30	11.11
RS01A...213	RS-1A-213	1.5	15	3.5 to 68	5, 10	0.35	8.16
RS01A...143	RS-1A-143	2.0	15	2.2 to 35	5, 10	0.40	6.25
RS01A...214	RS-1A-214	2.5	23	1.7 to 23	5, 10	0.45	4.94
RS01A...162	RS-1A-162	3.0	48	1.1 to 12	5, 10	0.55	3.31
RS01A...208	RS-1A-208	4.0	47	0.72 to 6.44	5, 10	0.75	1.78
RS01A...207	RS-1A-207	6.0	70	0.35 to 2.17	5, 10	1.0	1.0
RS01A...215	RS-1A-215	8.0	48	0.29 to 1.61	5, 10	1.25	0.64
RS01A...173	RS-1A-173	10.0	50	0.23 to 1.16	5, 10	1.50	0.44
RS01A...216	RS-1A-216	15.0	35	0.19 to 0.82	5, 10	1.75	0.33
RS01A...217	RS-1A-217	20.0	46	0.12 to 0.42	5, 10	2.0	0.25

Notes

(1) The continuous current rating applies only to values equal to or less than the crossover value. The continuous power rating applies only to values equal to or higher than the crossover value.

- Be aware that the inherent compromise involved between resistive and fusing functions sometimes makes certain exact combinations unattainable. However, in nearly all cases, this does not prevent the production of a functional, reliable fuse resistor thoroughly capable of meeting application requirements.

GLOBAL PART NUMBER INFORMATION

Global Part Numbering example: RS01A402R0JS70209

R	S	0	1	A	4	0	2	R	0	J	S	7	0	2	0	9

GLOBAL MODEL	VALUE	TOLERANCE	PACKAGING	SPECIAL
(see Typical Electrical Specifications Global Model column for options)	**R** = decimal **15R00** = 15 Ω	**J** = ± 5.0 % **K** = ± 10.0 %	**E70** = lead (Pb)-free, tape/reel **E12** = lead (Pb)-free, bulk **S70** = tin/lead, tape/reel **B12** = tin/lead, bulk	(dash number) (up to 3 digits) From **1 to 999** as applicable

Historical Part Numbering example: RS-1A-209 402 Ω 5 % S70

RS-1A-209	402 Ω	5 %	S70
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE CODE	PACKAGING

If a MODEL listed in TYPICAL ELECTRICAL SPECIFICATIONS table does not meet your requirements, then please include the following information. It will enable us to choose the best design for your application.

1. Operating wattage or current, ambient temperature and required resistance stability. (% ΔR/1000 h)
2. Fusing wattage or current and maximum "blow" time. Also, minimum "blow" time, if applicable.
3. Nominal resistance and maximum allowable resistance tolerance, (5 % to 10 % preferred).
4. Maximum allowable physical size.
5. Voltage to be interrupted.
6. Frequency of power source, wave form and a brief description of your application.

For technical questions, contact: ww2aresistors@vishay.com
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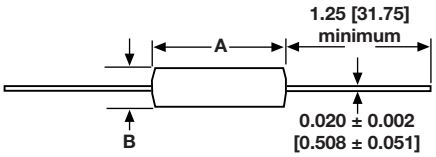
DIMENSIONS in inches [millimeters]



MODEL	A	B
RS01A…xxx	0.422 ± 0.015 [10.72 ± 0.381]	0.110 ± 0.015 [2.79 ± 0.381]

TECHNICAL SPECIFICATIONS		
PARAMETER	**UNIT**	**TYPICAL WIREWOUND FUSE RESISTOR CHARACTERISTICS**
Temperature Coefficient	ppm/°C	± 30 for 10 Ω and above; ± 50 for 1.0 Ω thru 9.9 Ω; ± 90 for 0.1 Ω thru 0.99 Ω
Power Rating	W	1.0 standard, higher power ratings available
Dielectric Strength	V_{AC}	500
Insulation Resistance	MΩ	1000 minimum dry
Fusing Times	s	0.001 to 1.0
Minimum Fusing Current	A	Approximately 4 times the continuous operating current obtainable on some designs. Larger ratios produce better designs.
Terminal Strength	lb	5 minimum

MATERIAL SPECIFICATIONS

Element: copper-nickel alloy or nickel-chrome alloy, depending on resistance value

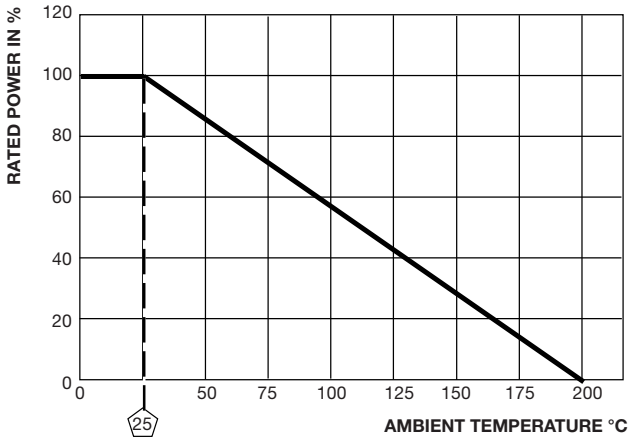
Core: alumina ceramic

Encapsulant: thermoset silicone mold compound

End caps: stainless steel

Terminals: tinned copperweld

Part marking: Dale, model, value, tolerance, date code



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