

## WIRE WOUND RESISTORS SILICONE COATED TYPE

### RSR

SERIES

EDGE WOUND

Silicone Coated

Power Resistors Heavy Duty  
Industrial Applications

- Type 'A' compatible for using with Amp type connectors.
- Flame retardant coating compatible with UL standards.
  - 40W to 500W
  - R05 to 18R

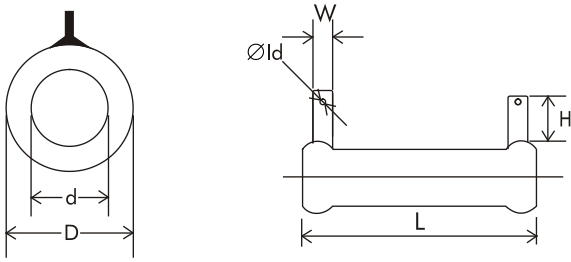




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## PHYSICAL CONFIGURATION

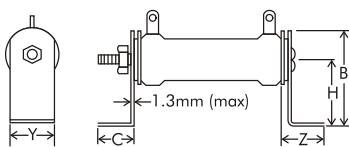


TYPE	POWER RATING at 70°C	DIMENSIONS (mm)						MOUNTING HARDWARE AVAILABLE	RESISTANCE RANGE		INDICATIVE WEIGHT PER PC (gms)
		L ±3	* D ±2	d ±1	W ±0.35	Øld ±0.3	H +2/-0		min	max	
RR40A	40W	75.0	30.0	14.3	4.75	1.4	6.35	102/303	R05	1R9	63.0
RR40B	40W	75.0	30.0	14.3	5.0	3.0	8.5	102/303	R05	1R9	64.5
RR50A	50W	100.0	30.0	14.3	4.75	1.4	6.35	102/303	R07	2R0	80.0
RR50B	50W	100.0	30.0	14.3	5.0	3.0	8.5	102/303	R07	2R0	82.0
RR60A	60W	115.0	30.0	14.3	6.35	1.65	8.5	102/303	R075	2R2	95.0
RR60B	60W	115.0	30.0	14.3	8.0	4.3	11.0	102/303	R075	2R2	97.0
RR80A	80W	130.0	30.0	14.3	6.35	1.65	8.5	102/303	R09	2R5	102.0
RR80B	80W	130.0	30.0	14.3	8.0	4.3	11.0	102/303	R09	3R0	104.0
RR100A	100W	105.0	37.0	19.1	6.35	1.65	8.5	103/303	R10	2R9	112.0
RR100B	100W	105.0	37.0	19.1	8.0	4.3	11.0	103/303	R10	2R9	115.0
RR120A	120W	115.0	37.0	19.1	6.35	1.65	8.5	103/303	R10	4R0	123.0
RR120B	120W	115.0	37.0	19.1	8.0	4.3	11.0	103/303	R10	4R0	125.0
RR150A	150W	140.0	37.0	19.1	6.35	1.65	8.5	103/303	R10	5R0	187.0
RR150B	150W	140.0	37.0	19.1	8.0	4.3	11.0	103/303	R10	5R0	190.0
RR200A	200W	200.0	37.0	19.1	6.35	1.65	8.5	103/303	R10	7R0	242.0
RR200B	200W	200.0	37.0	19.1	8.0	4.3	11.0	103/303	R10	7R0	245.0
RR300A	300W	250.0	48.0	24.0	6.35	1.65	8.5	104/304	R10	10R	573.0
RR300B	300W	250.0	48.0	24.0	8.0	4.3	11.0	104/304	R10	10R	575.0
RR400A	400W	300.0	48.0	24.0	6.35	1.65	8.5	104/304	R10	14R	740.0
RR400B	400W	300.0	48.0	24.0	8.0	4.3	11.0	104/304	R10	14R	744.0
RR500A	500W	300.0	58.0	27.0	6.35	1.65	8.5	104/304	R10	18R	1180.0
RR500B	500W	300.0	58.0	27.0	8.0	4.3	11.0	104/304	R10	18R	1190.0

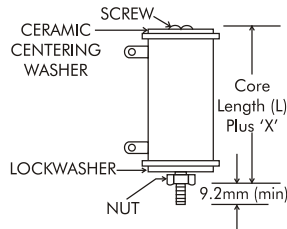
- \* D-Dimensions given are indicative and could exceed tolerances given depending on resistance value being wound.
- Resistor types suffixed with 'A' are compatible with Amp 250 connectors.

## MOUNTING SPECIFICATIONS

### HORIZONTAL THRU-BOLT



### VERTICAL THRU-BOLT

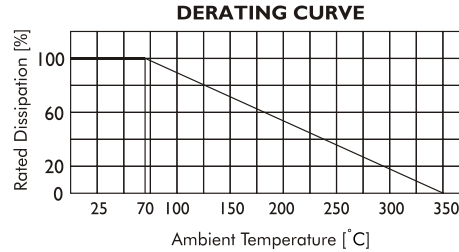




WIRE WOUND  
RESISTORS  
SILICONE  
COATED  
TYPE  
**RSR**

BRACKET TYPE	Y ±1.0mm	Z ±2mm	H ±2mm	MOUNTING SLOT ±0.5mm	C ±2mm	B ±2mm
102	20.0	25.0	33.0	5.5 x 11.0	20.0	46.0
103	32.0	30.0	37.0	7.0 x 11.0	22.0	54.0
104	48.0	32.0	57.0	7.0 x 11.0	23.0	82.0

BRACKET TYPE	X (APPROXIMATE) (mm)
303	15.0
304	16.0



## ELECTRICAL AND ENVIRONMENTAL CHARACTERISTICS / DATA

PARAMETER/PERFORMANCE TEST & TEST METHOD	PERFORMANCE REQUIREMENTS
<b>Power Rating</b> (Rated Ambient Temperature)	Full Power dissipation at 70°C and linearly derated to zero at 350°C (Refer Derating curve above).
<b>Resistance Tolerances Available</b>	±10% (K) ± 5(J) on request.
<b>Temperature Range</b>	-55°C to + 350°C with suitable derating as per derating curve above.
<b>Voltage Rating / Limiting Voltage / Max working Voltage</b>	$V = \sqrt{P \times R}$
<b>Voltage Proof / Dielectric Withstanding Voltage</b> (Based on limiting voltage x 2 or 500V whichever is applicable for 60 secs)	$\Delta R \pm [1\% + R05]$
<b>Temperature Co-efficient</b>	< R10 ± 120 ppm /°C ; < 1R0 ± 80 ppm /°C > 1R0 ± 60 ppm /°C
<b>Short Time Overload</b> (10 x Rated Power for 5 secs)	$\Delta R \pm [2\% + R05]$
<b>Insulation Resistance</b> (Test Method no. 302 of MIL 202F)	> 1000M (Dry) > 100M (Wet)

## TYPICAL APPLICATIONS

In RSR series, a corrugated alloy tape is wound edgewise or flat onto a ceramic tube which is coated with a silicone cement which is compatible with UL standards.

This ribbed construction puts both sides of the resistive element in contact with air thus creating a convention area four times greater than that obtained with normal wire wound resistors.

These resistors are designed primarily to withstand heavy overload surges upto max 7 times their rated wattage for 10 to 15 seconds (max). This characteristic makes them most suitable for controlling motors requiring high dissipation, low resistance values and high current capacity.

## ORDERING INFORMATION

Series	HTR Type	Packing	Resistance Value	Tolerance	Type of Mounting Hardware
RSR	RR200B/RR200B*	Bulk RR200B/RR200B*	3R0	K	103 / 303

1. For RoHS version - RR200B \*
2. For Non inductive type - N RR200B