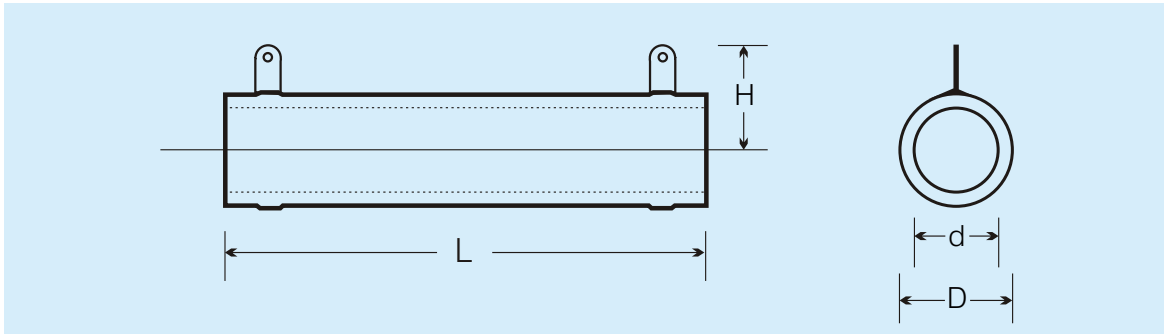
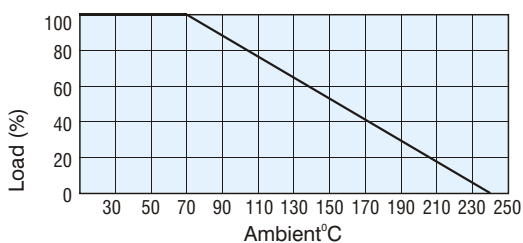


- High Power Wire Wound Resistors Industrial Grade
- Most Suitable For Load banks
- Flame Proof Silicon Coated
- Super Heat dissipation
- High Stability



Dimensions (in mm)						
Type	Watt	L ± 3.00	D ± 1.00	d ± 1.00	H ± 3.00	Max.Ohm Range
CSFR 10	10	45.0	10.0	8.0	17.0	1 K Ohms
CSFR 15	15	63.0	12.0	9.0	17.0	3 K Ohms
CSFR 20	20	52.0	14.0	9.0	17.50	5 K Ohms
CSFR 25	25	63.0	16.0	9.0	17.50	5 K Ohms
CSFR 40	40	75.0	19.0	12.0	23.0	5 K Ohms
CSFR 50	50	100.0	19.0	12.0	23.0	10 K Ohms
CSFR 60	60	125.0	19.0	12.0	27.0	10 K Ohms
CSFR 75	75	150.0	25.0	15.0	27.0	10 K Ohms
CSFR 100	100	150.0	28.0	19.0	30.5	10 K Ohms
CSFR 120	120	165.0	28.0	19.0	30.5	15 K Ohms
CSFR 150	150	200.0	28.0	19.0	30.5	15 K Ohms
CSFR 200	200	250.0	28.0	19.0	30.5	15 K Ohms
CSFR 300	300	305.0	38.0	25.0	42.5	15 K Ohms
CSFR 400	400	305.0	43.0	35.0	47.5	15 K Ohms
CSFR 500	500	325.0	55.0	42.0	59.5	15 K Ohms

Power Derating Curve



Note :

- Closer Tolerances Available on Request
- Ohmic Value other than specified on Request
- Non Inductive Types available on Request
- Standard Mounting Brackets available
- Custom Built Mounting Brackets on Request
- Resistor Terminations are Tin Plated Copper or Brass

Note: Customised variations available on request.

Characteristics	Test Methods	Limits
D C Resistance	Resistors are tested with standard specified voltages for its Ohmic values to check the specified tolerance.	The Resistors shall be within Specified tolerance limits.
Short Time Overload	The Resistors shall be subjected to 2.5 times the Rated Voltage or Maximum overload voltage (Which ever is low) For a duration of 5 secs.	$\Delta R \% = \pm 2.0\%$ (+ 0.05 Ω)
Temp-Coefficient	The Resistors value shall be checked at 2 temp. i.e.one At Ambient & the final at Amb + 100 0 C. The TCR is then Calculated as : $\frac{R_2 - R_1}{R_1} \times \frac{1}{t_2 - t_1} \times 10^6 = \text{ppm}/^\circ\text{C}$	PPM 100 PPM For Low values TCR Exceeds
Rated Load	A Rated Continuous Working Voltage or Maximum Wkg. Voltage whichever less shall be applied to the resistors for a duration of 2 Hrs.	$\Delta R \% = \pm 2 \% \text{ Max}$
Insulation Resistance	The Insulation is measured between the terminals (Both the Terminals are Shorted) & the body of the resistor, with the help Of 500 V. Megger.	> 1000 Meg
Resistance to Solder Heat	A solder bath is Maintained at 350°C.The specimen leads are Subjected to the bath for a duration of 10 secs.	$\Delta R \% = \pm 1 \% \text{ Max}$
Load Life	The specimen shall be subjected to an ambient of 70°C For a duration of 1000 Hrs. The specimen shall also be Loaded for full power dissipation. The duty cycle shall be 1½ Hr. On & ½ Hr. Off.	$\Delta R \% = \pm 5 \% \text{ Max}$
Steady State Humidity	The shall be subjected to an amb. Of 40°C with RH as 95%, for a duration of 56 days. A small DC voltage shall be so applied that the specimen shall dissipate 1% of the rated power.	$\Delta R \% = \pm 5 \% \text{ Max}$

Mounting Specifications

Bracket No.	Y	Z	H	Mounting Slot	C	B	Bracket Type	X (Approx. mm)
	± 1.0	± 2.0	± 2.0	$\pm 1.0 \text{ mm}$	± 2.0	± 2.0	CR 301	11.5
CR 101	12.20	21.83	25.40	5.5 x 8.5	19.05	34.92	CR 303	15.0
CR 102	19.50	24.50	32.75	5.5 x 11.11	19.50	45.50	CR 304	16.0
CR 103	31.50	30.00	35.00	7.1 x 11.11	22.22	53.98		

