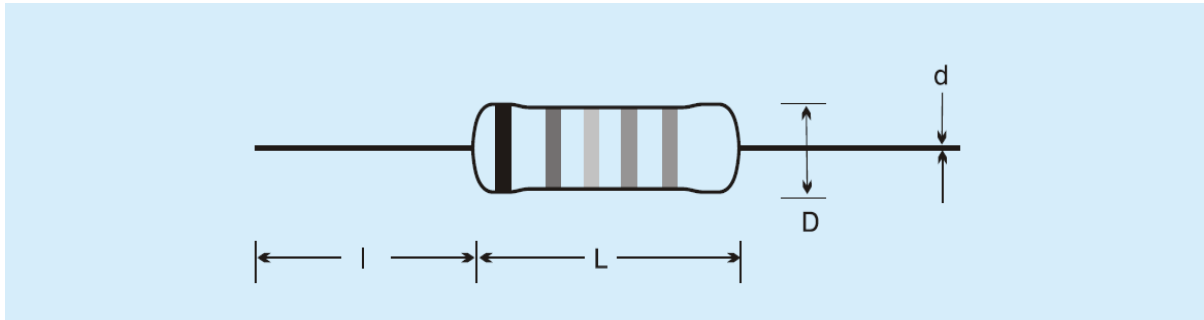
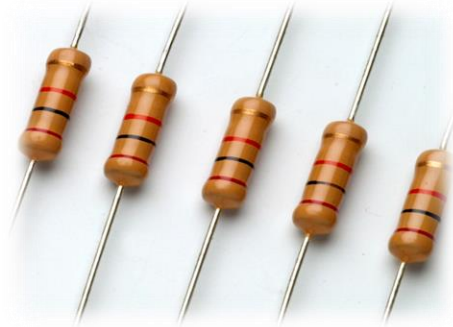


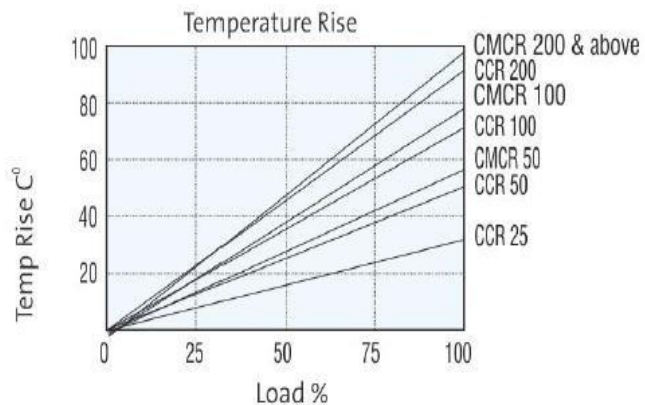
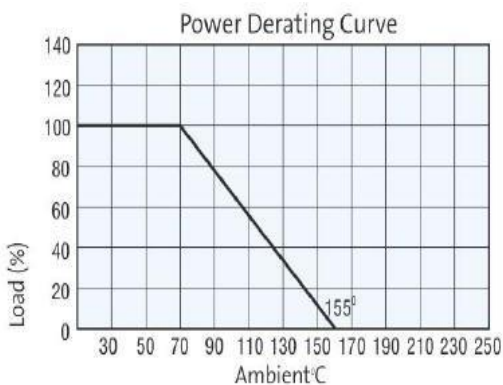
- Economy grade resistors produced by fully automated process.
- Special types such as Flame proof available on request.
- Tin plated copper wire ensures excellent solderability.
- Solvent proof color code marking.
- Standard Tolerance - 2% & 5% available.
- Packed in Taped form.
- conforms to JSS 50401.
- Style – RFGP-9



Dimensions ( in mm )								
Type	Watt	L ±1.0	D ±1.0	d ±0.05	I ±2.0	Max Working Voltage (Dc / Rms )	Max Overload Voltage (Dc / Rms )	Resistance Range
CCR 25	0.25	6.50	2.50	0.48	26	250	500	1 E – 15 M
CCR 50	0.5	9.0	3.50	0.50	26	350	700	1 E – 15 M
CCR 100	1.0	12.00	4.50	0.66	32	500	1000	1 E – 15 M
CCR 200	2.0	16.00	5.50	0.66	30	500	1000	1 E – 15 M
CMCR 50	0.50	6.50	2.50	0.48	26	250	500	1 E – 15 M
CMCR 100	1.0	9.0	3.50	0.50	26	350	700	1 E – 15 M
CMCR 200	2.0	12.0	4.50	0.66	32	500	1000	1 E – 15 M
CMCR 300	3.0	16.00	5.50	0.66	30	500	1000	1 E – 15 M

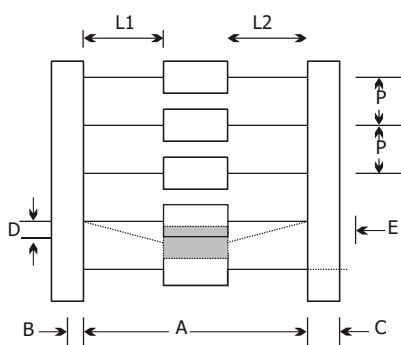
Note:

- Rated continuous Working Voltage:  $\sqrt{P \times R}$  or Maximum Working Voltage whichever is low.
- Maximum Overload Voltage: RCWV x 2.5 for 5 or Maximum Overload Voltage whichever is low.



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 Max overload voltage ( Whichever is low) For duration of 5 secs.	$\Delta R\% = \pm 1.0\%$ (+ 0.05 $\Omega$ )	
Temp-Coefficient	The Resistors value shall be checked at 2 temps. i.e. one at Ambient & the final at Amb. + 100 0 C. The TCR is then Calculated as: $\frac{R_2 - R_1}{R_1} \times \frac{1}{t_2 - t_1} \times 10^6 = \text{ppm}/^\circ\text{C}$	Range	
		TCR	
		22K $\Omega$	$\pm 150$ to $\pm 450$
		24K-470K	$\pm 150$ to $\pm 700$
		510K-2M2	$\pm 150$ to $-1000$
		2M4-10M	$\pm 150$ to $>1000$
Rated Load	A Rated Continuous Working Voltage or Maximum Working Voltage whichever less shall be applied to the resistors for a duration of 2 Hrs.	$\Delta R\% = \pm 1\%$ Max	
Solderability	A Solder bath is maintained at 230 $^\circ\text{C}$ . The specimen leads are immersed in bath & withdrawn within 3 sec. A suitable Flux is used during this test.	A Fresh solder shall cover the specimen leads by min 95% Coverage.	
Resistance to solder heat	A Solder bath is maintained at 350 $^\circ\text{C}$ . The specimen leads are subjected to bath for duration of 10 sec.	$\Delta R\% = \pm 1\%$ Max	
Resistance to solvents	The specimen shall be subjected to IPA for duration of 1 min. 10 Strokes of hard brush shall be applied. The test shall be conducted 3 times.	The color code marking shall remain legible.	
Dielectric strength	A foil is wrapped around the specimen body. A voltage of 300V @0.5 ma shall be applied between both the terminals of the specimen for a duration of 1 min.	There shall be no flash over or break down.	
Terminal Strength	Pull Test: The Resistor Leads shall be pulled using 5N Force.  Bend Test: The resistors leads are bend through 180 $^\circ$ three times	No evidence of mechanical damage.	
Load Life	The specimen shall be subjected to an ambient of 70 $^\circ\text{C}$ for duration of 1000 Hrs. The specimen shall also be Loaded for full power dissipation. The duty cycle shall be 1 $\frac{1}{2}$ Hr. On & $\frac{1}{2}$ Hr. Off.	$\Delta R\% = \pm 5\%$ Max	
Steady state humidity	The shall be subjected to an amb. Of 40 $^\circ\text{C}$ 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 rated power.	$\Delta R\% = \pm 5\%$ Max	



Taping Details:

Type	A $\pm 1.0$	B $\pm 1.0$	C $\pm 0.5$	D	E	P $\pm 0.3$	L1-L2
CCR 25	50	4	6	1 MAX	0.00	5	1 MAX
CCR 50	52	4	6	1 MAX	0.00	5	1 MAX
CCR 100	63	4	6	1 MAX	0.00	5	1 MAX
CCR 200	63	4	6	1 MAX	0.00	5	1 MAX
CMCR 50	50	4	6	1 MAX	0.00	5	1 MAX
CMCR 100	52	4	6	1 MAX	0.00	5	1 MAX
CMCR 200	63	4	6	1 MAX	0.00	5	1 MAX
CMCR 300	63	4	6	1 MAX	0.00	5	1 MAX



**CERMET RESISTRONICS PVT. LTD**

Gate No. 61, Plot No. 1 & 2, Tal. Bhor, Shindewadi, Pune- 412205, Maharashtra, India  
 Contact No. :- +91 9921050098 / 9975596459 / 9975596456  
 E-mail: - sales@cermet.co.in  
 Website :- www.resistorcermet.com