

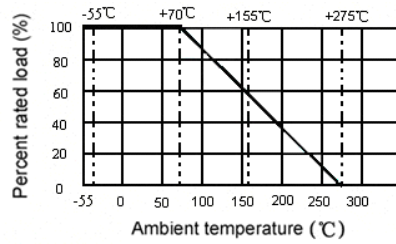
BILATERAL CEMENT FIXED RESISTOR

Features

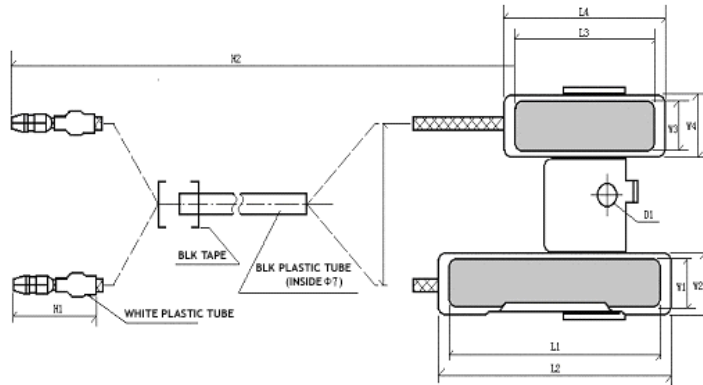
- Small size and sturdy mechanically safe
- High safety standard



Derating Curve:



Raw Materials:



TYPE	$L_1 \pm 0.5$	$L_2 \pm 1$	$L_3 \pm 0.5$	$L_4 \pm 1$	$W_1 \pm 0.5$	$W_2 \pm 1$	$W_3 \pm 0.5$
BCR 20W+5W	64	66	42	44	13	15	13
TYPE	$W_4 \pm 1$	$H_1 \text{ MAX.}$	$H_2 +10$ $- 0$	$D_1 +0.5$ $- 0$			
BCR 20W+5W	15	30	250	6.5			

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Performance Specifications:

Characteristics	Test Methods	Limits															
Temperature coefficient JIS - C - 5202 5.2	Natural resistance change per temp. degree centigrade $\frac{R_2 - R_1}{R_1 (t_2 - t_1)} \times 10^6 \text{ (PPM / } ^\circ\text{C)}$ R ₁ : Resistance value at room temperature (t ₁) R ₂ : Resistance value at room temp. plus 100°C (t ₂)	± 400PPM / °C															
Short-time overload JIS - C - 5202 5.5	Permanent resistance change after the application of a potential of 2.5 times RCWV or the Max. overload voltage respectively specified in the above list, whichever less for 5 seconds.	Resistance change rate is ± (5% + 0.05Ω) Max. with no evidence of mechanical damage															
Dielectric withstanding voltage JIS - C - 5202 5.7	Resistors shall be clamped in the trough of a 90° metallic V- block and shall be tested at AC potential respectively for 60 + 10 / -0 seconds.	No evidence of flashover mechanical damage, arcing or insulation break down.															
Pulse Overload JIS - C - 5202 5.8	Resistance change after 10,000 cycles (1 second "on", 25 seconds "off") at 4 times RCWV or the Max. pulse overload voltage.	Resistance change rate is ± (5% + 0.05Ω) Max. with no evidence of mechanical damage															
Terminal Strength JIS - C - 5202 6.1	Direct Load: Resistance to a 2.5 kg. direct load for 10 seconds in the Direction of the longitudinal axis of the terminal flake.	No evidence of mechanical damage															
Temperature cycling JIS - C - 5202 7.4	Resistance change after continuous five cycles for duty cycle specified below: <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Step</th> <th>Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-55°C±3°C</td> <td>30 mins.</td> </tr> <tr> <td>2</td> <td>Room temp.</td> <td>10 - 15 mins.</td> </tr> <tr> <td>3</td> <td>+155 °C±2 °C</td> <td>30 mins.</td> </tr> <tr> <td>4</td> <td>Room temp.</td> <td>10 - 15 mins.</td> </tr> </tbody> </table>	Step	Temperature	Time	1	-55°C±3°C	30 mins.	2	Room temp.	10 - 15 mins.	3	+155 °C±2 °C	30 mins.	4	Room temp.	10 - 15 mins.	Resistance change rate is ± (5%+0.05 Ω) No evidence of mechanical damage.
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Humidity JIS - C - 5202 7.5	Temporary resistance change after 240 hours exposure in a humidity test chamber controlled at 40°C ± 20°C and 90 to 95% relative humidity.	Resistance change rate is ± (5%+0.05Ω) No evidence of mechanical damage.															
Load life in humidity JIS - C - 5202 7.9	Resistance change after 1,000 hours operating at RCWV with duty cycle of (1.5 hours "on", 0.5 hour "off") in a humidity test chamber controlled at 40°C ± 2°C and 90 to 95% relative humidity.	Resistance change rate is ± (10% + 0.05Ω) No evidence of mechanical damage															
Load life JIS - C - 5202 7.10	Permanent resistance change after 1,000 hours operating at RCWV with duty cycle of (1.5 hours "on", 0.5 hour "off") at 70°C ± 2°C ambient.	Resistance change rate is ± (10% + 0.05Ω) No evidence of mechanical damage															
Vibration Test	Frequency: 10 ~ 50 Hz Amplitude: 1.5 mm Vibrated for a period of 2 hours in XYZ three direction each other, total 6 hours.	Resistance change rate is ± (10% + 0.05Ω) No evidence of mechanical damage															

* RCWV = Rated Continuous Working Voltage = $\sqrt{\text{Rated Power} \times \text{Resistance Value}}$