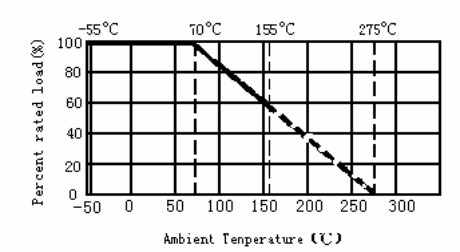
HIGH POWER WIRE-WOUND RESISTOR

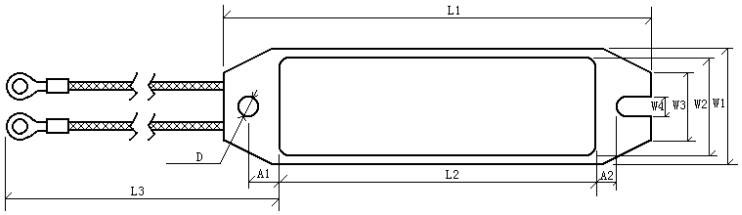
Features

- **FLAMEPROOF**– Safety flameproof construction
- **EXCLUSIVE SURGE CHARACTERISTICS** - Wire-wound resistors has excellent characteristics to resist a large current without damage.
- **UNIFORM QUALITY** - An exclusive automated process and severe quality –control system, combining fine solutions of resistance wires and associated qualified materials result uniform quality and consistent performance in reliability.

Derating Curve:



Dimension:



UNIT: mm

TYPE	L_1±1.0	L_2±1.0	L_3±2.0	A_1±0.5	A_2±0.5	W_1±0.5	W_2±0.2	W_3±0.2	W_4±0.2	D±0.2
HAWR 80W	150	123	300	8	6	34.2	30	16	4.5	4.5
HAWR 220W	230	191	440	14.5	14.5	64.5	56.5	47	4.4	4.4

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Performance Specifications:

<table>
<tr><th>Characteristics</th><th>Test Methods</th><th>Limits</th></tr>
<tr><td>Temperature coefficient
JIS – C – 5202 5.2</td><td>Natural resistance change per temp. degree centigrade
$\frac{R_2 - R_1}{R_1(t_2-t_1)} \times 10^6$ (PPM / ºC)
R_1 : Resistance value at room temperature (t_1)
R_2 : Resistance value at room temp. plus 100ºC (t_2)</td><td>± 350PPM / °C</td></tr>
<tr><td>Short – time overload
JIS – C – 5202 5.5</td><td>Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds.</td><td>Resistance change rate is
± (2% + 0.05Ω)
No evidence of mechanical damage</td></tr>
<tr><td>Dielectric withstanding voltage
JIS – C – 5202 5.7</td><td>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.</td><td>No evidence of flashover mechanical damage, arcing or insulation break down.</td></tr>
<tr><td>Temperature cycling
JIS – C – 5202 7.4</td><td>Resistance change after continuous five cycles for duty cycle specified below:
<table><tr><th>Step</th><th>Temperature</th><th>Time</th></tr><tr><td>1</td><td>-55℃±3℃</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 ℃±2 ℃</td><td>30 mins.</td></tr><tr><td>4</td><td>Room temp.</td><td>10 – 15 mins.</td></tr></table></td><td>Resistance change rate is ± (5%+0.05 Ω)
No evidence of mechanical damage.</td></tr>
<tr><td>Humidity
JIS - C - 5202 7.5</td><td>Temporary resistance change after 240 hours exposure in a humidity test chamber controlled at 40°C ± 20°C and 90 to 95% relative humidity.</td><td>Resistance change rate is
± (5%+0.05 Ω)
No evidence of mechanical damage.</td></tr>
<tr><td>Load life in humidity
JIS - C - 5202 7.9</td><td>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.</td><td>Resistance change rate is
± (5% + 0.05Ω)
No evidence of mechanical damage</td></tr>
<tr><td>Load life
JIS - C - 5202 7.10</td><td>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.</td><td>Resistance change rate is
± (5% + 0.05Ω)
No evidence of mechanical damage</td></tr>
</table>

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