

Aluminum Case High Power Wire-Wound Resistors

Performance Specification

Temperature Coefficient	±350PPM/°C
Short Time Overload	±(5.0% + 0.05Ω) Max, with no evidence of mechanical damage.
Dielectric Withstanding Voltage	No evidence of mechanical damage, arcing or insulation breakdown.
Temperature Cycling	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Humidity (Steady State)	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Load Life in Humidity	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Load Life	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.

Ordering Procedure: Ex.: HAWR, 220W,+/-10%, 180Ω

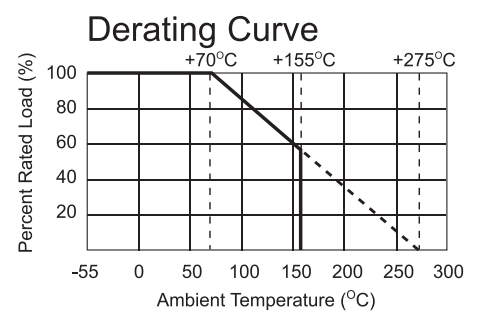
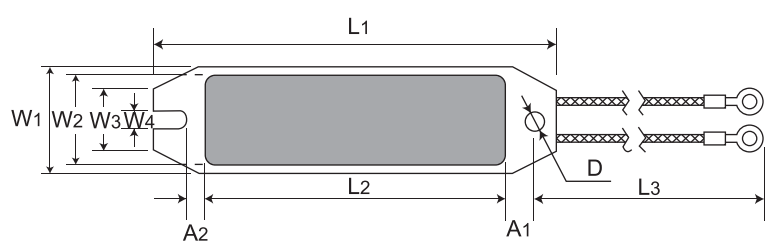
H	A	W	R	B	0	K	0	1	8	1	2	2	0
Type: HAWR = HAWR				Connector style: A0 = Terminal type B0 = Cable type		Resistance Value: • E-24 series: 1 st digit is "0" 2 nd & 3 rd digits are the significant figures of the resistance 4 th indicates the number of zeros: "J" ~ 0.1, "K" ~ 0.01 Ex.: 4.7Ω ~ 47J, 4.7KΩ ~ 472			Wattage: 060 = 60W 080 = 80W 100 = 100W 120 = 120W 220 = 220W				
						Tolerance: K = ±10%							

Features

- Safety flameproof construction
- Excellent Surge characteristics to resist large current without damage.
- Consistent reliability performance



HAWR Type



Type	L1±1	L2±1	L3±2	A1±0.5	A2±0.5	W1±0.5	W2±0.2	W3±0.2	W4±0.2	D±0.2	Resistance Range
HAWR 60W	100	80	300	5	5	30	28	14	4.5	4.5	1Ω ~ 2KΩ
HAWR 80W	150	123	300	8	6	34	30	16	4.5	4.5	1Ω ~ 3KΩ
HAWR 100W	150	127	300	6.5	6.5	34	32	16	4.5	4.5	1Ω ~ 3KΩ
HAWR 120W	182	166	300	6	6	42	40	20	4.5	4.5	1Ω ~ 13KΩ
HAWR 220W	230	191	400	14.5	14.5	64	56	47	4.5	4.5	1Ω ~ 20KΩ



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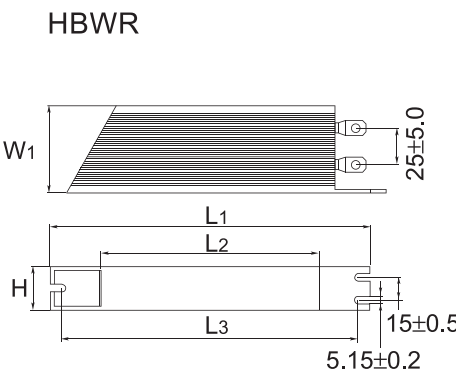
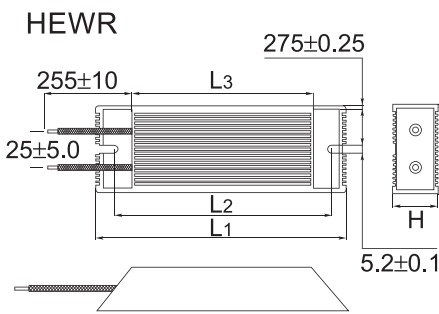
Temperature Coefficient	±350PPM/°C
Short Time Overload	±(2%+0.05Ω) Max, with no evidence of mechanical damage.
Dielectric Withstanding Voltage	No evidence of mechanical damage.
Temperature Cycling	±(2%+0.05Ω) Max, with no evidence of mechanical damage.
Humidity (Steady State)	±(5%+0.05Ω) Max, with no evidence of mechanical damage.
Load Life in Humidity	±(5%+0.05Ω) Max, with no evidence of mechanical damage.
Load Life	±(5%+0.05Ω) Max, with no evidence of mechanical damage.

Ordering Procedure: Ex.: HEWR, 200W, +/- 5%, 180Ω

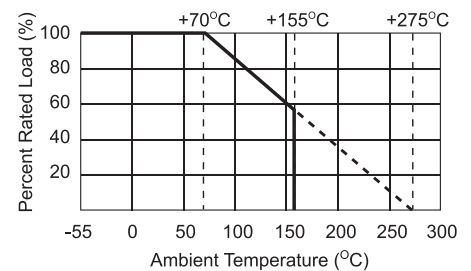
<p>H E W R B 0 J 0 1 8 1 2 0 0</p> <p>Type: HEWR = HEWR HBWR = HBWR</p>	<p>Connector style: A0 = Terminal type B0 = Cable type</p>	<p>Resistance Value: • E-24 series: 1st digit is "0" 2nd & 3rd digits are the significant figures of the resistance 4th indicate the number of zeros: "J" ~ 0.1, "K" ~ 0.01 Ex.: 4.7Ω ~ 47J, 4.7KΩ ~ 472</p>	<p>Wattage: 200 = 200W 300 = 300W 400 = 400W 500 = 500W 600 = 600W A00 = 1000W</p>
<p>Tolerance: J = ±5% K = ±10%</p>			

Features

- High Power and Excellent Load Life Stability
- Strongly resistance to moisture solvent and insulation
- High Surge resistance item available
- Application: Breaking resistor, Elevator



Derating Curve



Type	L1±2		L2±2		L3±2		W1±2		H±2		Resistance Range
	HEWR	HBWR	HEWR	HBWR	HEWR	HBWR	HEWR	HBWR	HEWR	HBWR	
200W	165	190	150	160	125	165	60	30	30	60	1Ω ~ 7KΩ
300W	215	240	200	210	175	215	60	30	30	60	1Ω ~ 8KΩ
400W	265	290	250	260	225	265	60	30	30	60	0.5Ω ~ 10KΩ
500W	335	360	270	330	295	335	60	30	30	60	0.5Ω ~ 12KΩ
600W	335	360	270	330	295	335	60	30	30	60	0.5Ω ~ 12KΩ
1000W	400	-	385	-	340	-	100	-	50	-	0.5Ω ~ 15KΩ