

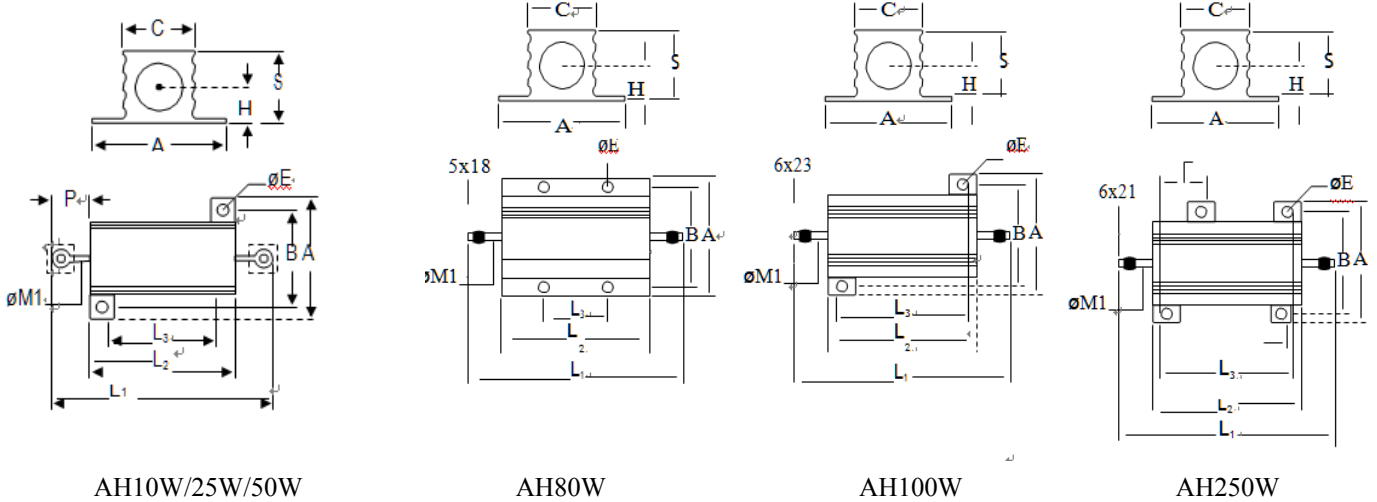
# ALUMINUM HOUSED RESISTORS

# AH SERIES

## Feature

- Extremely stable capability.
- Super heat dissipation, instant overload capability.
- Instant overload capability
- Standard tolerance:  $\pm 1\%$ ,  $\pm 5\%$  in E-24 series

## Dimension

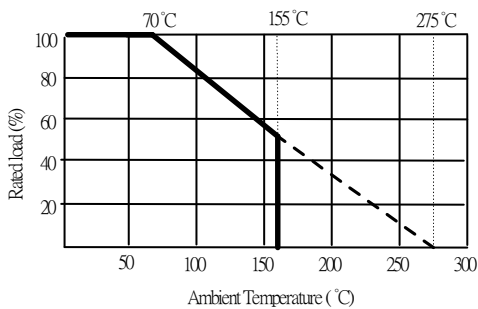


## General Specification

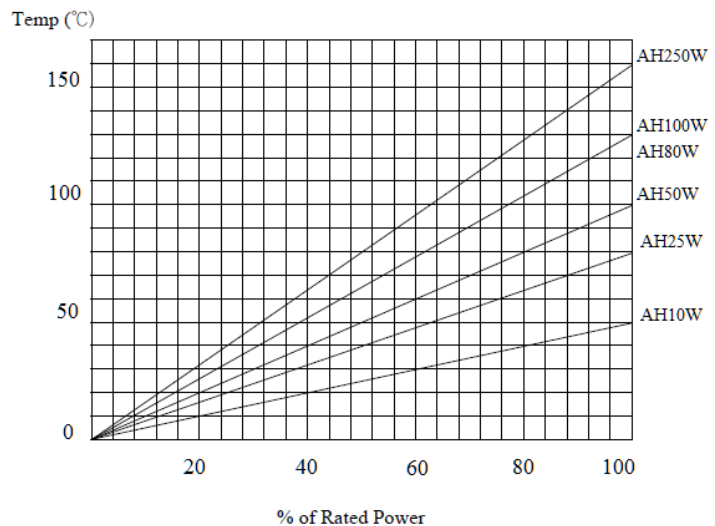
TYPE	DIMENSION											POWER RATING	RESISTANCE RANGE
	L1 $\pm 2$	L2 $\pm 1$	L3 $\pm 1$	A $\pm 1$	B $\pm 1$	C $\pm 1$	E $\pm 0.3$	S $\pm 1$	H $\pm 0.5$	P $\pm 2$	M1 $\pm 0.05$		
AH10W	32	19	14	20	15.5	10.5	2	10	5	6	2.0	10W	0.1 $\Omega$ -50K $\Omega$
AH25W	47	27	18	27	19	15	3.2	15.5	7	10	2.0	25W	0.1 $\Omega$ -50K $\Omega$
AH50W	70	50	39	29	21	15	3.2	15.5	7	10	2.0	50W	0.1 $\Omega$ -100K $\Omega$
AH80W	102	66	35	47	37	28	4.5	25	12	5x18	5.0	80W	0.1 $\Omega$ -3K $\Omega$
AH100W	135	89	69	70	48	46	5	44.5	19.5	6x23	6.0	100W	0.1 $\Omega$ -3K $\Omega$
AH250W	175	114	98	77	64	53	5	55.5	25	6x21	6.0	250W	0.1 $\Omega$ -3K $\Omega$

\* Maximum Working Voltage determined by  $E = \sqrt{P \cdot R}$ , Maximum Overload Voltage equals to 2.5 x E

## Derating Curve



## Surface Temperature Rise (Mounted)



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## Characteristics

Item	Requirement	Test Method
Short Time Overload	$\pm 2\% + 0.05 \Omega$	JIS-C-5201-1 5.5 RCWV*2.5 or Max. overload voltage for 5 seconds
Insulation Resistance	$> 100M \Omega$	JIS-C-5201-1 5.6 Apply 100VDC for 1 minute
Endurance	$\pm 5\% + 0.05 \Omega$	JIS-C-5201-1 7.10 70 $\pm$ 2 $^{\circ}$ C, Max. RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5hrs "OFF"
Damp Heat with Load	$\pm 5\% + 0.05 \Omega$	JIS-C-5201-1 7.9 40 $\pm$ 2 $^{\circ}$ C, 90~95% R.H. RCWV for 1000 hrs with 1.5 hrs "ON" and 0.5hrs "OFF"
Solderability	90% min. Coverage	JIS-C-5201-1 6.5 235 $\pm$ 5 $^{\circ}$ C for 3 seconds
Dielectric Withstanding Voltage	1000V	JIS-C-5201-1 5.7 Apply Max. Overload Voltage for 1 minute
Temperature Coefficient	$\pm 200PPM/^{\circ}C$ (50ppm, 100ppm is available)	Resistance value at room temperature and room Temperature+100 $^{\circ}$ C
Resistance To Solvent	No deterioration of coatings and markings	JIS-C-5201-1 6.9 Trichroethane for 1 min. with ultrasonic
Shelf Life	$\Delta R = \pm 0.1\%$	12 months at room temperature 25 $\pm$ 3 $^{\circ}$ C, 80%RH Max.

**\*Storage Temperature : 25 $\pm$ 3 $^{\circ}$ C; Humidity < 80%RH**

## Part Numbering

<b>AH</b>	<b>50W</b>	<b>J</b>	-	<b>100R</b>
↓	↓	↓		↓
Type	Power	Tol.		Resistance
	10W	F=±1%		0R1 = 0.1 $\Omega$
	25W	J=±5%		10R = 10 $\Omega$
	50W			1K2R = 1.2K $\Omega$
	80W			
	100W			
	250W			