

## AH series

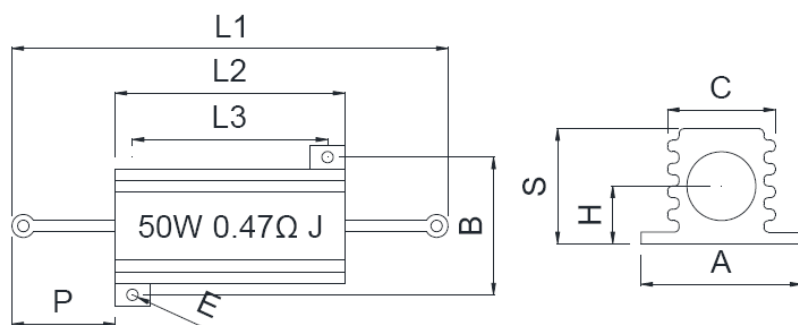
# Gold Aluminum Housed Wire Wound Resistors

### ◆ Features

- » High power rating ,small size and ultra precision.
- » Standard winding & non-inductive winding types.
- » High stability ,strong construction.
- » RoHS compliant.

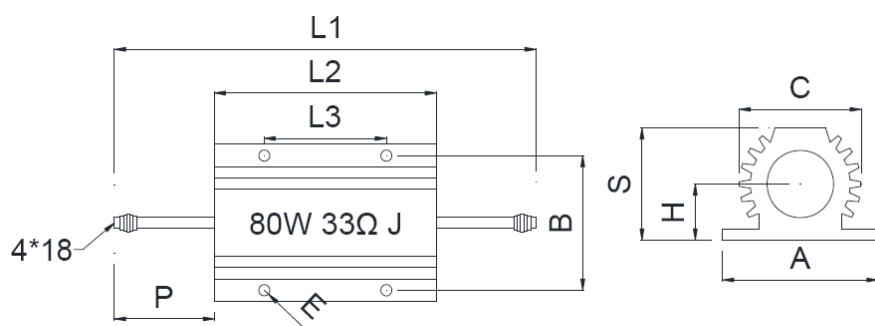
### ◆ Dimensions

#### » 5W ~ 50W



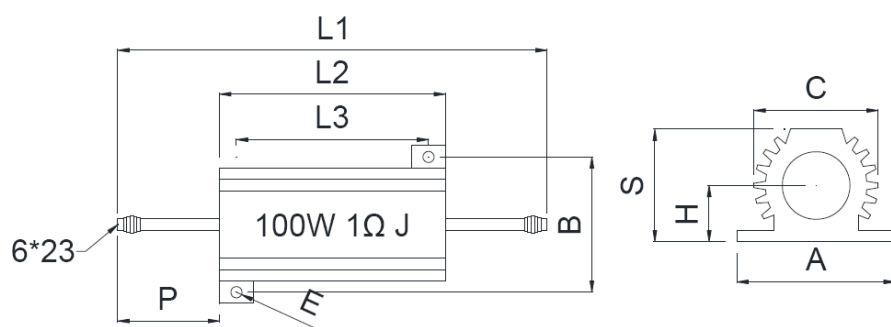
Type	L1±2	L2±1	L3±1	A±1	B±1	C±1	E±0.3	S±1	H±0.5	P±2	Resistance Range
AH-5W	25	15	10	16.5	12.5	8.5	2	8	4	5	0.1Ω~50K
AH-10W	32	19	14	20	15.5	10.5	2	10	5	6	0.1Ω~50K
AH-25W	47	27	18	27	19	15	3.2	15.5	7	10	0.1Ω~100K
AH-50W	70	50	39	29	21	15	3.2	15.5	7	10	0.1Ω~100K

#### » 80W ~ 100WS



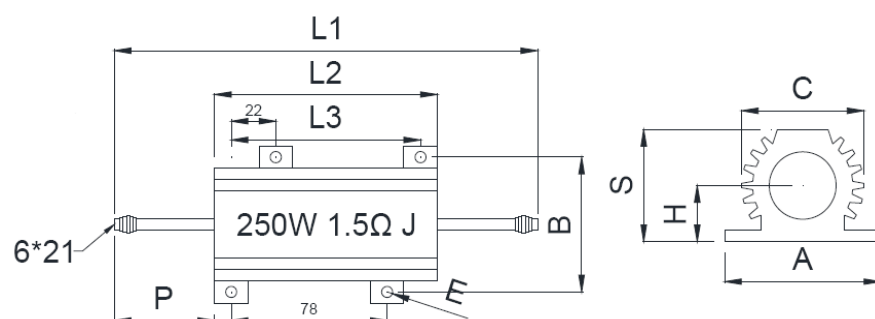
Type	L1±2	L2±1	L3±1	A±1	B±1	C±1	E±0.3	S±1	H±0.5	P±2	Resistance Range
AH-80W	102	66	35	47	37	28	4.5	25	12	5*18	0.1Ω~100K
AH-100WS	102	66	35	47	37	28	4.5	25	12	5*18	0.1Ω~100K

#### » 100W



Type	L1±2	L2±1	L3±1	A±1	B±1	C±1	E±0.3	S±1	H±0.5	P±2	Resistance Range
AH-100W	135	89	69	70	58	46	5	44.5	19.5	6*23	0.1Ω~3K

### » 200W ~ 300W



Type	L1±2	L2±1	L3±1	A±1	B±1	C±1	E±0.3	S±1	H±0.5	P±2	Resistance Range
AH-200W	155	114	98	77	64	53	5	55.5	25	6*21	0.1Ω~3K
AH-250W	155	114	98	77	64	53	5	55.5	25	6*21	0.1Ω~3K
AH-300W	155	114	98	77	64	53	5	55.5	25	6*21	0.1Ω~3K

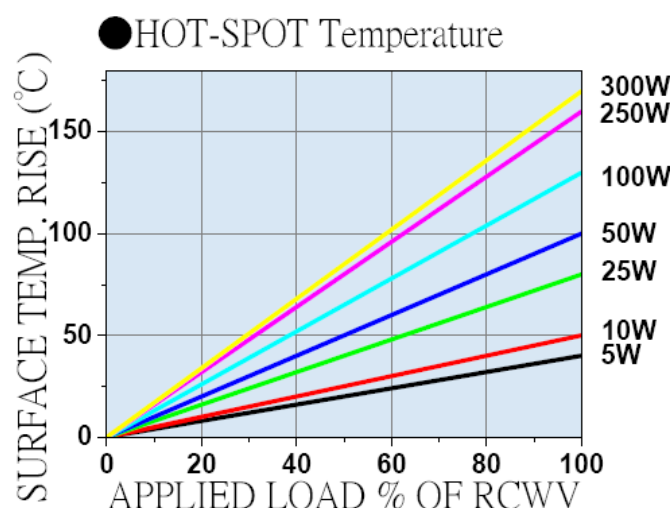
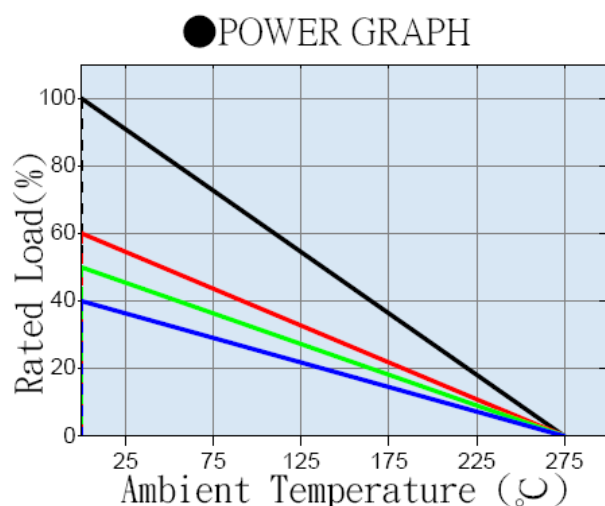
### ◆ Part Number

AH	50W	J	3K
Type	Watt	Tolerance	R value
AH	50W	J = ± 5%	2.3K = 2K3
	100WS	F = ± 1%	10KΩ = 10K
	300W		

### ◆ Electrical Characteristics

Characteristics	Limits	Test Methods
Resistance Tolerance	Resistance Tolerance 0Ω~100KΩ±1%(F), ±5%(J)	JIS-C-5202 5-1
Temperature Coefficient	±200ppm/ °C max.	JIS-C-5202 5-2b
Power Rating Load	$\Delta R/R \leq \pm(1\%+0.05\Omega)$ Surface Temp. Rise 350°C max.	JIS-C-5202 5-4
Short-Time Overload	$\Delta R/R \leq \pm(2\%+0.05\Omega)$ 100% Rated Power 5 Seconds	JIS-C-5202 5-5
Insulation Resistance	DC500V 100MΩmin	JIS-C-5202 5-6
Dielectric Withstanding Voltage	AC3000V 60Sec.	JIS-C-5202 5-7

Short-time Overload Rating												
Load Time (Second)	1	2	3	4	5	10	30	60	180	300	600	900
Power Incrase (%)	2600	2000	1600	1400	1300	1000	600	450	200	150	120	110



## ◆ Environmental Characteristics



Parameters	Test Conditions	Specifications
Short time Over Load	5X wattage rating-5sec	$\Delta R \pm (0.5\% + 0.05\Omega) \text{MAX}$
Moisture Resistance	Temp 40°C moisture 95% DC100V 500HR	$\Delta R \pm (0.5\% + 0.05\Omega) \text{MAX}$
Moisture Load Life	Temp 40°C moisture 95% 1/10X Wattage rating (1.5Hr ON-0.5Hr OFF)-Repeat 1000Hr	$\Delta R \pm (0.5\% + 0.05\Omega) \text{MAX}$
Load Life	Load Rating(chass is mounted) (1.5Hr ON 0.5Hr OFF) -Repeat 1000Hr	$\Delta R \pm (1.5\% + 0.05\Omega) \text{MAX}$
Vibration	10c/s~50c/s~10c/s(lmin)2Hr each of paralleled and right angle	$\Delta R \pm (0.2\% + 0.05\Omega) \text{MAX}$
Heat Resistance	275°C 2Hr	$\Delta R \pm (0.5\% + 0.05\Omega) \text{MAX}$
Dielectric Strength	AH-5 AH-10 AH-25 1000V AH-50 1500V AH-100 AH-250 2500V	$\Delta R \pm (0.2\% + 0.05\Omega) \text{MAX}$
Insulation Resistance	Under the same test condition of Dielectric Strength, Load DC500v and measure the insulation R.	1000M $\Omega$ min
Terminal Strength	(1) Pull Test (30 sec Min) AH-51kg.AH-10 2.3kg.AH-25.AH-50 4.5kg (2) Torque Test (5~15sec)AH-100 27kg-cm,AH 250 36Kg-cm	$\Delta R \pm (0.2\% + 0.05\Omega) \text{MAX}$