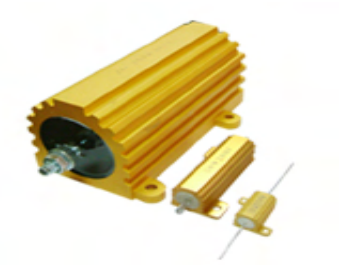
Gold Aluminum Housed Wirewound Resistors

AHW Series

MERITEK

RoHS

FEATURES



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

ELECTRICAL SPECIFICATION

Characteristics	Limits	Test Methods
Resistance Tolerance	Resistance 1Ω≤R ±5%(J) Resistance Tolerance 1Ω≤R ±10%(K)	JIS-C-5202 5-1
Temperature Coefficient	±200ppm/ °C max.	JIS-C-5202 5-2b
Power Rating Load	ΔR/R≤±(1%+0.05Ω) Surface Temp. Rise 350°C max.	JIS-C-5202 5-4
Short-Time Overload	ΔR/R≤±(2%+0.05Ω) 100% Rated Power5 Seconds	JIS-C-5202 5-5
Insulation Resistance	DC500V 100MΩ min	JIS-C-5202 5-6
Dielectric Withstanding Voltage	AC3000V 60Sec.	JIS-C-5202 5-7

DIMENSIONS AND RESISTANCE RANGE

Type	DIMENSIONS(mm)										Resistance Range
	L1±2	L2±1	L3±1	A±1	B±1	C±1	E±0.3	S±1	H±0.5	P±2	
AHW-5W	25	15	10	16.5	12.5	8.5	2	8	4	5	0.1Ω~50K
AHW-10W	32	19	14	20	15.5	10.5	2	10	5	6	0.1Ω~50K
AHW-25W	47	27	18	27	19	15	3.2	15.5	7	10	0.1Ω~100K
AHW-50W	70	50	39	29	21	15	3.2	15.5	7	10	0.1Ω~100K
AHW-80W	102	66	35	47	37	28	4.5	25	12	5*18	0.1Ω~100K
AHW-100WS	102	66	35	47	37	28	4.5	25	12	5*18	0.1Ω~100K
AHW-100W	135	89	69	70	58	46	5	44.5	19.5	6*23	0.1Ω~3K
AHW-250W	155	114	98	77	64	53	5	55.5	25	6*21	0.1Ω~3K
AHW-300W	155	114	98	77	64	53	5	55.5	25	6*21	0.1Ω~3K

Specifications are subject to change without notice. rev.6a

Gold Aluminum Housed Wirewound Resistors

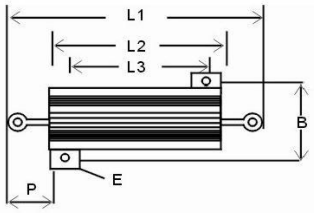
RoHS

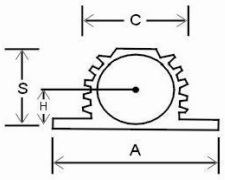
AHW Series

MERITEK

PRECISION POWER RESISTORS DIMENSIONS---5~50W.100W.250W

AHW-5W
AHW-10W
AHW-25W
AHW-50W

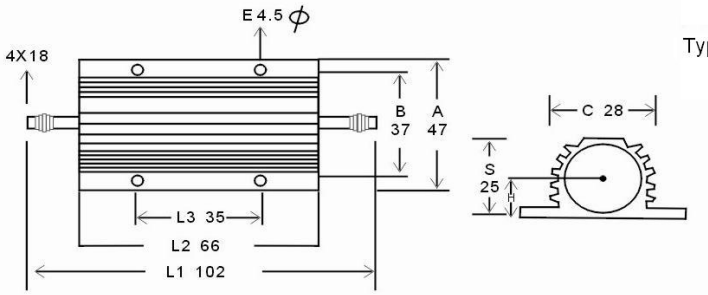




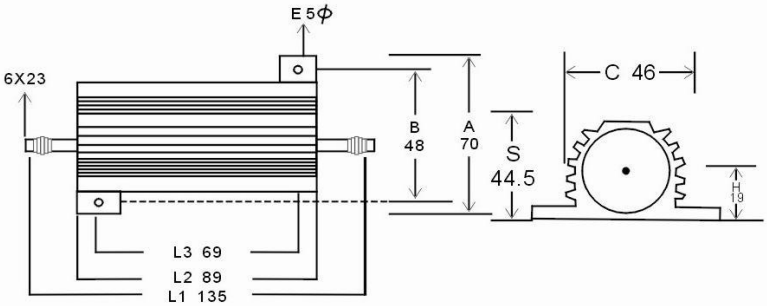
AP-5W
AP-10W
AP-25W
AP-50W

Type P: Copper Leads on both sides.

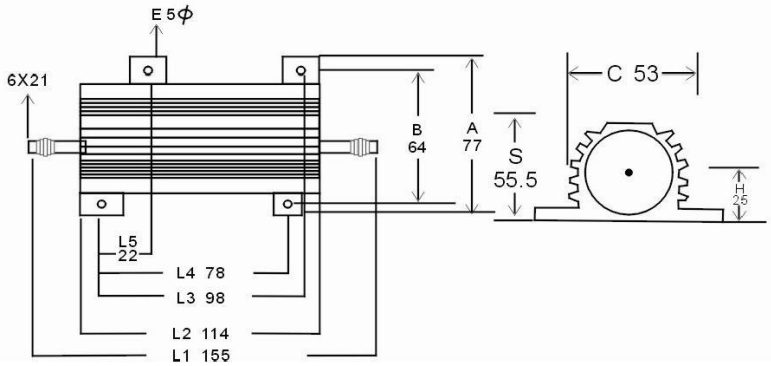
AHW-80W
AHW-100WS



AHW-100W



AHW-200W
AHW-250W
AHW-300W



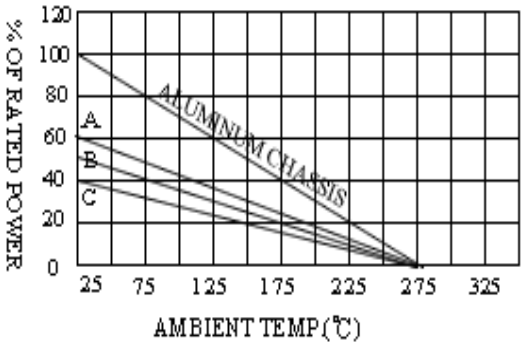
SHORT-TIME OVERLOAD RATING

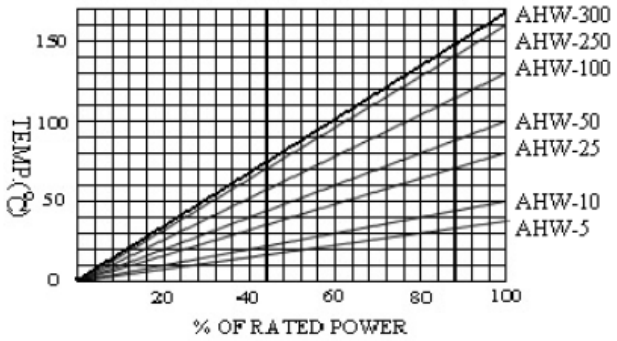
Load Time (Second)	1	2	3	4	5	10	30	60	180	300	600	900
Power Increase (%)	2600	2000	1600	1400	1300	1000	600	450	200	150	120	110

PERFORMANCE

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

SURFACE TEMPERATURE VERSUS POWER LOAD (On Chassis)





PACKING

AHW	BOX(PCS)	CARTON(PCS)
5W	400	2400
10W	300	1800
25W	150	600
50W	100	600
80W	8	48
100W	10	60
250W	6	36
300W	6	36