

PRECISION POWR RESISTORS Aluminum Housed (Chassis Mount)

FEATURE:

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

GENERAL SPEC:

Wattage Range: 6 styles to choose ranging from 5 to 250 watts.

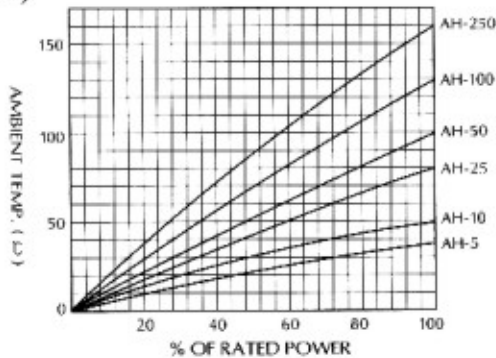
Resistance Tolerance: 10%, 5%, 3%, 2%, 1%, 0.5%

Operating Temperature Range: -55°C to +275°C

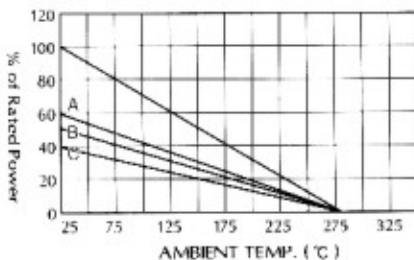
Dielectric Strength: AH-5 AH-10 AH-25 1000V AH-50 1500V AH-100 AH-250 2500V

Temperature Coefficient of Resistance: Standard T.C.:
± 30PPM/°C = 10 Ω and up, ± 50PPM/°C = 1 to 9.99 Ω
± 90PPM/°C = below 1 Ω

SURFACE TEMPERATURE VERSUS POWER LOAD (on Chassis)



DERATING



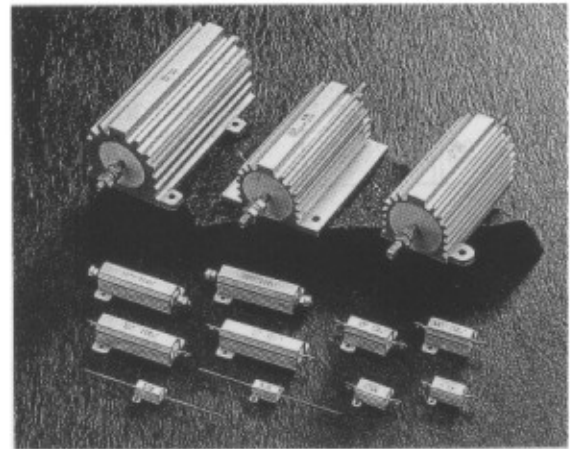
Derating is required to reduce chassis mounting area and for high ambient temperatures.
Curves
A=5 & 10 watt units, unmounted.
B=25 watt units, unmounted.
C=50, 100 & 250 watt units, unmounted.

Resistance Tolerance

D	± 0.5%
F	± 1%
G	± 2%
H	± 3%
J	± 5%
K	± 10%

HOW TO ORDER

AH50	20 Ω	D
Type	Resistance	Tolerance



STANDARD ELECTRICAL SPEC.

Type	MIL Style	Wattage Rating	Resistance Range (Ω)		MAX Working (V)		(g) MAX Weight	proper heat sink (aluminum chassis)
			AN Inductive	AHN Non-inductive	AH	AHN		
AH-5	RE60	5	0.05 - 3K	0.1 - 1 K	120	70	3	152X102X51X1t
AH-10	RE65	10	0.02 - 6K	0.03 - 2.3K	245	180	7	152X102X51X1t
AH-25	RE70	25	0.012-15K	0.02-5.5K	500	300	15	178X127X51X1t
AH-50	RE75	50	0.01-40K	0.02-12 K	1300	600	33	305X305X1.5t
AH-100	RE77	100	0.4 - 50K	0.12-25 K	1900	1340	450	305X305X3t
AH-250	RE80	250	0.6 - 80K	0.15-40 K	2500	1750	800	305X305X3t

PERFORMANCE

Parameters	Test Conditions	Specifications
Short Time Over Load	5X wattage rating - 5sec.	ΔR ± (0.5% + 0.05 Ω) MAX
Moisture Resistance	temp 40°C moisture 95% DC 100V 500Hr	ΔR ± (0.5% + 0.05 Ω) MAX
Moisture Load Life	temp 40°C moisture 95% 1/10 X wattage rating (1.5Hr ON - 0.5Hr OFF) - Repeat 1000Hr	ΔR ± (0.5% + 0.05 Ω) MAX
Load Life	Load Rating (chassis mounted) (1.5Hr ON 0.5Hr OFF) Repeat 1000Hr	ΔR ± (1.5% + 0.05 Ω) MAX
Vibration	10c/s-50c/s-10c/s (1min) - 2Hr each of paralleled and right angle	ΔR ± (0.2% + 0.05 Ω) MAX
Heat Resistance	275°C 2Hr	ΔR ± (0.5% + 0.05 Ω) MAX
Dielectric Strength	AH-5 AH-10 AH-25 1000V AH-50 1500V AH-100 AH-250 2500V	ΔR ± (0.2% + 0.05 Ω) MAX
Insulation Resistance	Under the same test condition of Dielectric Strength, load DC500V and measure the Insulation R.	1000Ω min
Terminal Strength	(1) Pull Test (30 sec Min) AH-5 1kg, AH-10 2.3kg, AH-25, AH-50 4.5kg (2) Torque Test (5-15sec) AH-100 27kg-cm, AH-250 36kg-cm	ΔR ± (0.2% + 0.05 Ω) MAX

Materials:

Encapsulant: Silicone

End caps: Stainless steel

Core: Ceramic steatite or alumina

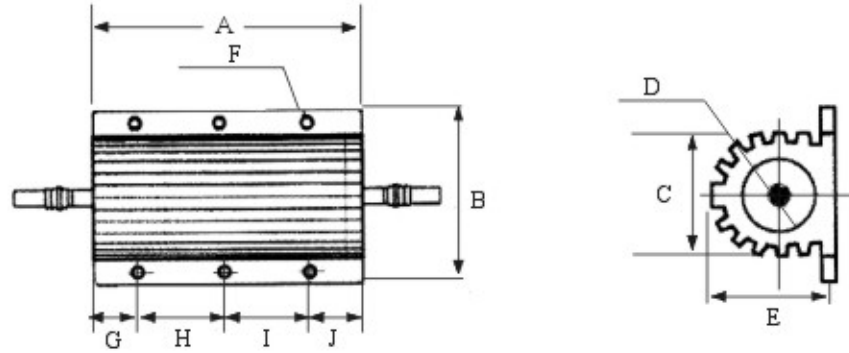
Housing: Aluminum with hard anodic coating

Element: Copper-nickel alloy, nickel-chrome alloy or manganese copper

Standard Terminals: 5-50W Tinned terminals

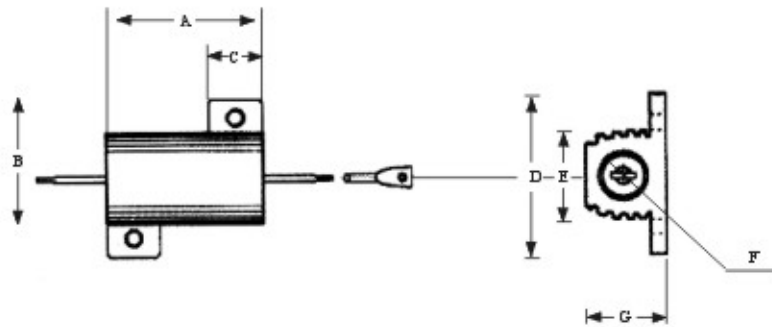
100-250W Threaded terminals

DIMENSIONS
AH-75-300
AHN-75-300



TYPE	DIMENSIONS(mm)									
	A±1	B±1	C±0.5	D±0.5	E±0.5	F	G	H	I	J
AH - 75 AHN - 75	67	48	22	17	26	4	16	TWO HOLES		16
AH - 100 AHN - 100	98	48	22	17	26	6	14	35	35	14
AH - 150 AHN - 150	136	48	22	17	26	6	12	56	56	12
AH - 200 AHN - 200	155	48	22	17	26	6	12.5	65	65	12.5
AH - 250 AHN - 250	170	48	22	17	26	6	20	65	65	20
AH - 300 AHN - 300	128	72	45	32	41	6	12	52	52	12

DIMENSIONS
AH-5 AH-10
AHN-5 AHN-10
AH-25 AH-50
AHN-25 AHN-50



TYPE	DIMENSIONS(mm)						
	A±1	B±0.5	C±0.5	D±1	E±0.5	F	G
AH - 5 AHN - 5	15	13	4	17	9.5	6	8
AH - 10 AHN - 10	20	17	6	23	10.5	7.5	10.5
AH - 25 AHN - 25	28	21	10	27	13	10	14
AH - 50 AHN - 50	50	23	10.5	29.5	15	11	15.5