Flat Type Metal Clad Wire Wound Resistors

The ARN(N=Narrow and flat) models are metal-clad, wire wound, high-power, low inductance resistors designed for industrial and other applications where space is at a premium and performance is a must. All of these models use an extruded aluminum housing providing rugged and strong protection. The flat design allows excellent heat dissipation. These models are available with flying leads. The most common applications for these models are : Motor drives, braking and snubber applications and power sources for industrial equipment.

■ GENERAL SPECIFICATIONS

Model	Rated Power (On Heat Sink)	Resistance Range	Resistance Tolerance
ARN 50	50W	1Ω~420Ω	D [±0.5%]
ARN 100	100W	1Ω~1.1KΩ	F [±1.0%]
ARN 150	150W	1Ω~1.75KΩ	G [±2.0%] J [±5.0%] K [±10.0%]

■ CHARACTERISTICS

Values in [ ] mean change in Ω after test

Operating Temp.		-55℃~+200℃
Insulation Resistance		20MΩ minimum
Dielectric Withstanding Voltage		Available options : AC1500V,2500V,3500V,4500V for 1min. ; Max. leakage current : 2mA
Temperature Coefficient		±260ppm/℃ maximum
Short Time Overload	±[1%+0.05Ω]	5×Power rating 5seconds
Moisture Resistance	±[2%+0.05Ω]	40℃, 95% RH, DC100C case to terminal, 500hours
Thermal Shock	±[1%+0.05Ω]	Power rating 30minutes, -25℃, 15minutes
Vibration	±[1%+0.05Ω]	10Hz-55Hz-10Hz (1minute), 2hours each direction
Moisture Load Life	±[2%+0.05Ω]	40℃, 95% RH, 0.1×Power rating 1.5hours on, 0.5hours off, 500hours
Load Life	±[5%+0.05Ω]	Power rating 1.5hours on, 0.5hours off, 500hours

■ SURFACE TEMPERATURE INCREASE VERSUS POWER LOAD

FREE AIR

HEAT SINK

ARN
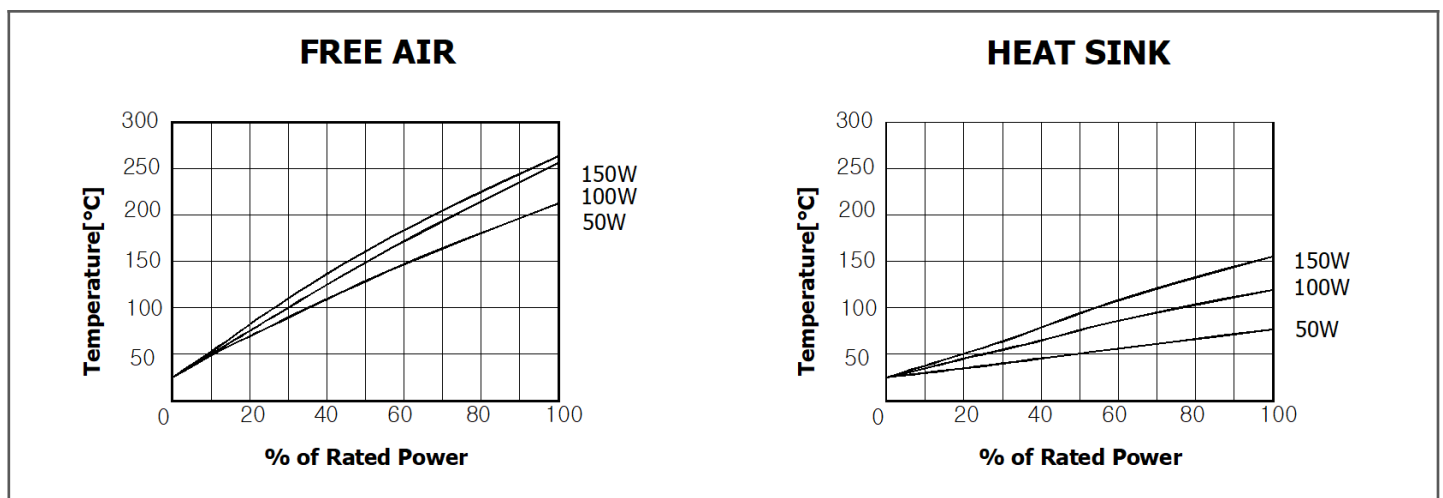
■ DIMENSIONS [mm]

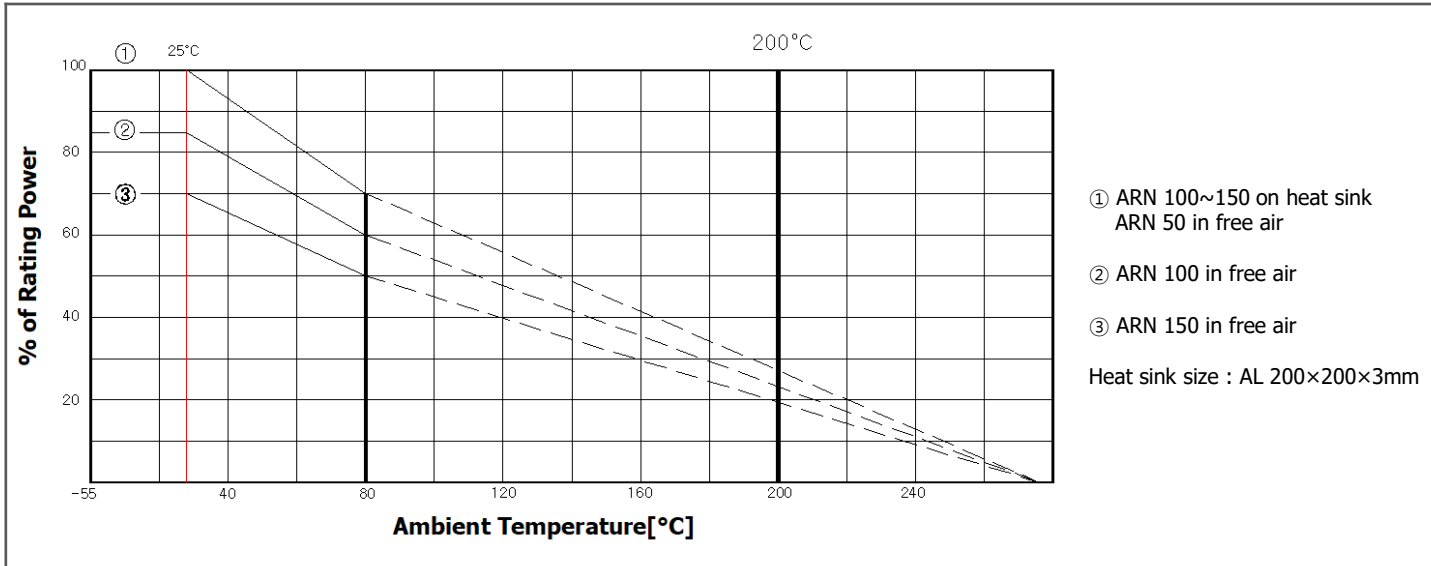| Model	Dimensions [mm]				Weight
	L1±1	L2±0.5	W1±0.5	W2±0.5	
ARN 50	70	50	60	50	100g
ARN 100	120	100	60	50	160g
ARN 150	170	150	60	50	220g
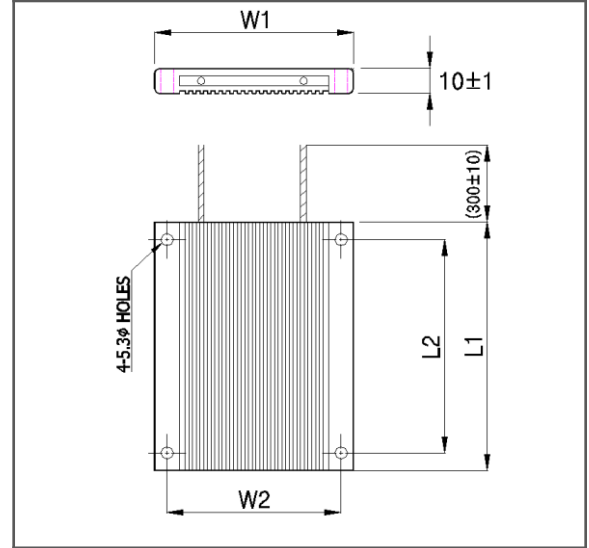
■ FLYING LEADS

Standard : Silicone Heat Resistance Wire 1.25mm²

- Rated current : 23A (at 60℃)

Option : Other options of flying leads are also available.

- Please ask RARA for info on this.

■ DERATING CURVES

① ARN 100~150 on heat sink
ARN 50 in free air

② ARN 100 in free air

③ ARN 150 in free air

Heat sink size : AL 200×200×3mm

■ ORDERING PROCEFURE EXAMPLE

ARN100	50Ω	J	FL XXXX
Model	Resistance	Tolerance	Flying Leads (mm) Option