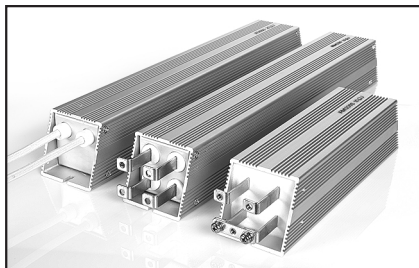




## Metal Clad Wire Wound Resistors



The IRV / ULV 600~1200(Cement molding type) models & IRM / ULM 600~1200 (Metal cover type) are our standard higher power wire wound, metal-clad resistors. The ULV/ULM 600~1200 is the UL approved version of the IRV/IRM 600~1200 models. These models have an extruded aluminum housing providing strong and rugged protection. Options include flying leads or tab terminals, inductive or non-inductive windings. 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		Resistance Range[Ω]						Resistance Tolerance (%)
	On Heatsink	In Free Air	Inductive			Non-Inductive			
			Tab TP *	Tab TS *	Flying Leads	Tab TP *	Tab TS *	Flying Leads	
IRV / IRM 600	600W	330W	0.1 ~ 9	9.1 ~ 94	0.1 ~ 94	0.1 ~ 5.3	5.4 ~ 21.2	0.1 ~ 21.2	IRV / ULV IRM / ULM F (±1.0) G (±2.0) J (±5.0) K (±10)
ULV / ULM 600			0.1 ~ 9	9.1 ~ 94	0.11 ~ 94	0.1 ~ 5.3	5.4 ~ 21.2	0.1 ~ 21.2	
IRV / IRM 800	800W	360W	0.1 ~ 11	11.1 ~ 112	0.1 ~ 112	0.1 ~ 7.2	7.3 ~ 28.8	0.1 ~ 28.8	
ULV / ULM 800			0.1 ~ 11	11.1 ~ 112	0.14 ~ 112	0.1 ~ 7.2	7.3 ~ 28.8	0.14 ~ 28.8	
IRV / IRM 1000	1000W	400W	0.1 ~ 18	18.1 ~ 150	0.1 ~ 150	0.1 ~ 9	9.1 ~ 37	0.1 ~ 37	
ULV / ULM 1000			0.1 ~ 18	18.1 ~ 90	0.17 ~ 140	0.1 ~ 9	9.1 ~ 36	0.17 ~ 36	
IRV / IRM 1200	1200W	480W	0.1 ~ 25	25.1 ~ 160	0.1 ~ 160	0.1 ~ 12	12.1 ~ 48	0.1 ~ 48	
ULV / ULM1200			0.1 ~ 25	25.1 ~ 175	0.21 ~ 160	0.1 ~ 12	12.1 ~ 48	0.21 ~ 48	

\* Note: Tab TP = Terminal Parallel Connection, Tab TS = Terminal Serial Connection

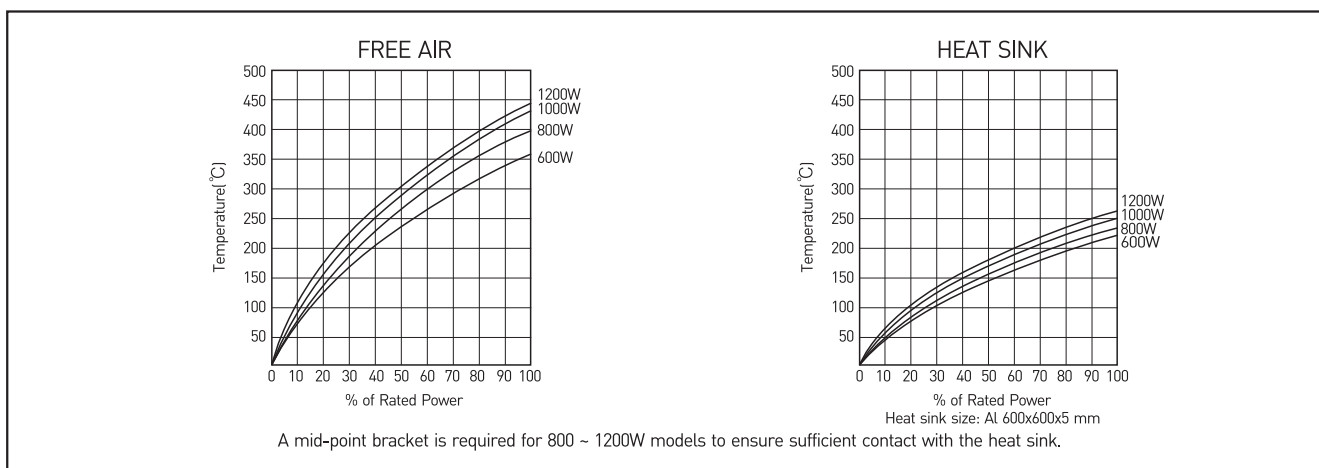
### CHARACTERISTICS

Values in [ ] mean change in Ω after test

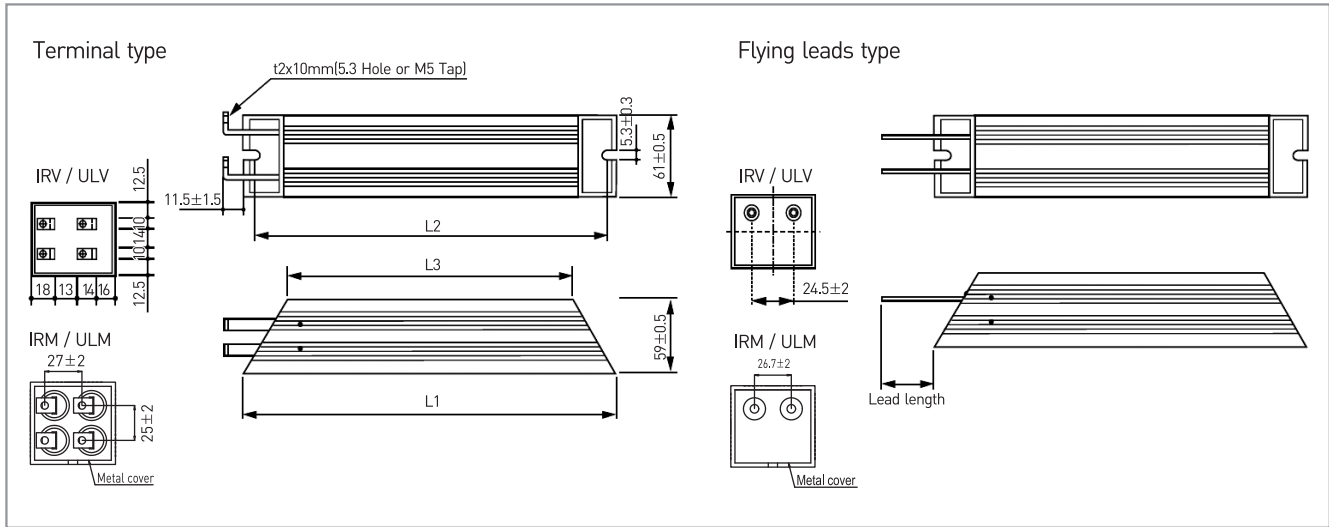
Temperature Range			-55°C ~ +200°C
Insulation Resistance			20MΩ minimum
Dielectric Withstanding Voltage	IRV, IRM	Available options: AC1500V, 3500V, 4500V, 5400V for min.; Max. leakage current: 2mA	
	ULV, ULM	Terminal type : 1000V for 1min. : 50V ~ 250V Lead type : 1000V + [Voltage ratingx2]for 1min. : 51V ~ 600V	
Temperature Coefficient			±260ppm/°C maximum
Short Time Overload	±[2%+0.05Ω]	10 x Power rating 5 seconds	
Moisture Resistance	±[3%+0.05Ω]	40°C, 95% RH, DC100V case to terminal, 500 hours	
Thermal Shock	±[2%+0.05Ω]	Power rating 30 minutes, -25°C, 15 minutes	
Vibration	±[1%+0.05Ω]	10Hz~55Hz~10Hz (1minute), 2 hours each direction	
Moisture Load Life	±[3%+0.05Ω]	40°C, 95% RH, 0.1 x Power rating 1.5 hours on, 30 minutes off, 500 hours	
Load Life	±[5%+0.05Ω]	Power rating 1.5 hours on, 30 minutes off, 500 hours	

\*Note: ULV/M Terminal type's System input voltage : Max.250V Internally , dielectric withstanding voltage options of AC 1500V, 3500V, 4500V, 5400V are also available.  
Optional dielectric withstanding voltage must be higher than standard (calculated by formula)

### SURFACE TEMPERATURE INCREASE VERSUS POWER LOAD



## DIMENSIONS [mm]



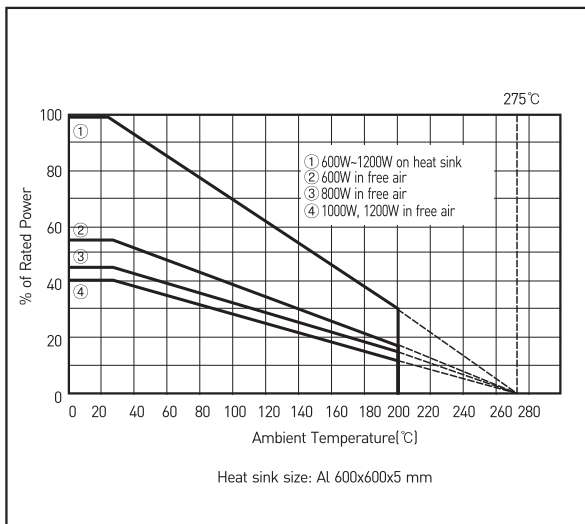
Model	Dimensions(mm)			Weight(g)
	L1±2	L2±2	L3±2	
IRV / ULV / IRM / ULM 600	235	216	195	1165
IRV / ULV / IRM / ULM 800	285	266	246	1500
IRV / ULV / IRM / ULM 1000	335	316	295	1835
IRV / ULV / IRM / ULM 1200	405	386	365	2304

## FLYING LEADS

	8 mm <sup>2</sup>	5.5 mm <sup>2</sup>	UI3512 AWG10
IRV / IRM 600 ~ 1200	0.1Ω ~ 0.99Ω	1Ω ~	X
ULV / ULM 600	X	X	0.11Ω ~
ULV / ULM 800	X	X	0.14Ω ~
ULV / ULM 1000	X	X	0.17Ω ~
ULV / ULM 1200	X	X	0.21Ω ~

\*Option: Other options of flying leads are also available. please ask RARA for more info. on this

## DERATING CURVES



## ORDERING PROCEDURE EXAMPLE

