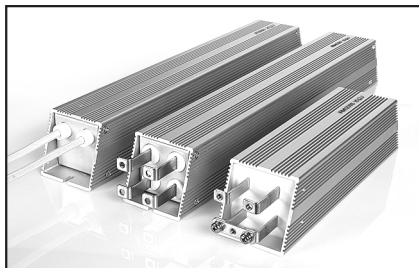


Metal Clad Wire Wound Resistors



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 (%)
			Inductive			Non-Inductive			
	On Heatsink	In Free Air	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

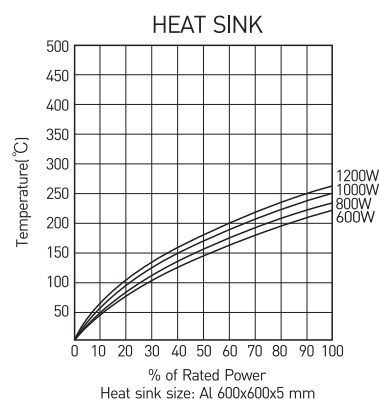
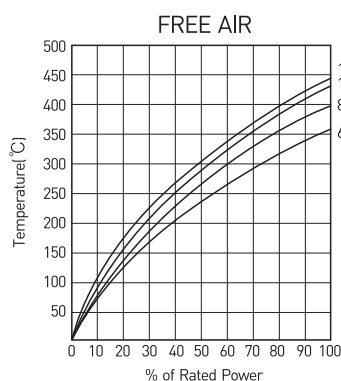
CHARACTERISTICS

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	500V for 1min. not more than 50V, [1000V + (Voltage ratingx2) for 1min. : 50V ~ 600V [2000V + (Voltage ratingx2.25) for 1min. : 601V ~ 1500V
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

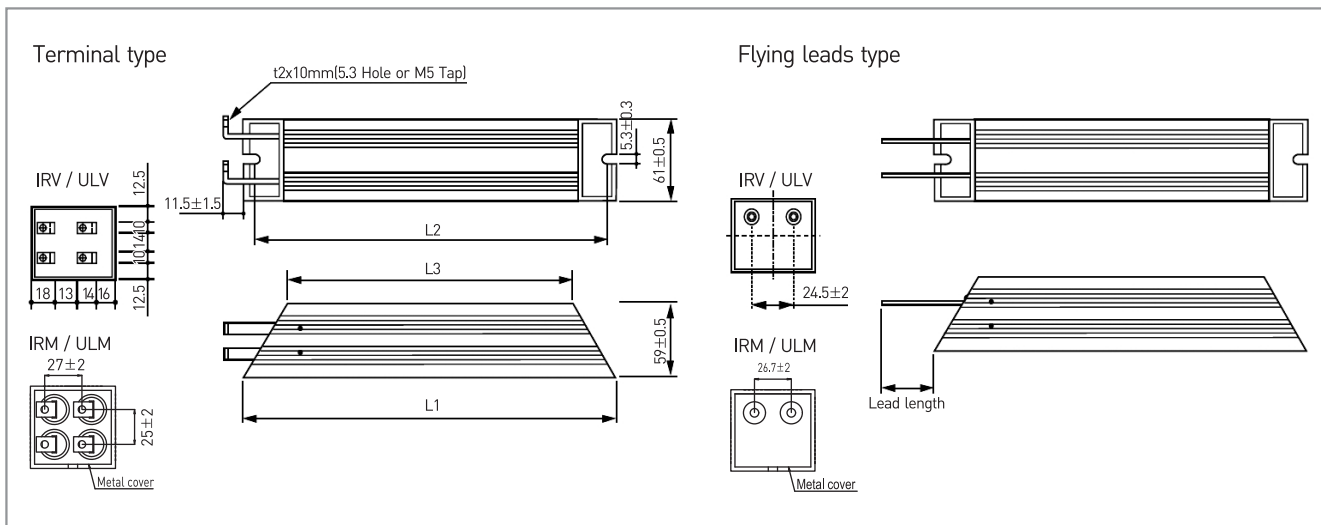
*Note: ULV / ULH dielectric withstanding voltage options of AC 1500V, 3500V, 4500V, 5400V are also available.
Optional dielectric withstanding voltage must be higher than standard (calculated by formula)

SURFACE TEMPERATURE INCREASE VERSUS POWER LOAD



A mid-point bracket is required for 800 ~ 1200W models to ensure sufficient contact with the heat sink.

DIMENSIONS [mm]



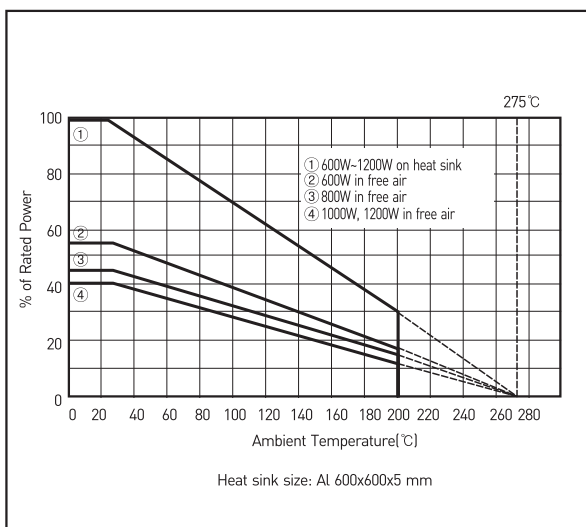
Model	Dimensions(mm)			Weight(g)
	L1±2	L2±2	L3±2	
IRV / ULV / IRM / ULM 600	235	216	195	1165
IRV / ULV / IRM / ULM 800	285	266	246	1500
IRV / ULV / IRM / ULM 1000	335	316	295	1835
IRV / ULV / IRM / ULM 1200	405	386	365	2304

FLYING LEADS

	8 mm ²	5.5 mm ²	UL3512 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

