

# Precision Metal Clad Shunt Resistors

Precision Metal Clad Resistors designed in four-terminal technique, are distinguished by high load capacity as well as excellent accuracy. Isolated voltage and current connections making them suitable for very precise current measurements. Easy current measurement is performed by attaching to current bus directly and connecting to voltage (ampere) metal through flexible wires. The ULH models are UL approved versions. Units have a low inductance, heavy copper terminals. The main application is battery manufacturing test jig. Applications include : Battery manufacturing test jig, current detection in precise power sources, constant current sources, industrial power conversion circuits, HEVs, fuel cells and constant electronic loads.



## GENERAL SPECIFICATIONS

Model	Rated Current [A]	Rated Voltage[mV]	Resistance [mΩ]	Tolerance[%]	Weight[g]		
IRH 80F	30	100	3.3333	B [±0.1] D [±0.5] F [±1.0]	200		
	40		2.5				
	50		2				
	75		1.3333				
IRH 100F	75	100	1.3333		310		
IRH 200F	100	100	1		B [±0.1] D [±0.5] F [±1.0]	680	
	150		0.6666				
	200		0.5				
	250		0.4				
IRH 300F	300	50	0.1666			B [±0.1] D [±0.5] F [±1.0]	1100
		100	0.3333				
	400	50	0.125				1180
		100	0.25				
500	100	0.2	1300				
	400	100		0.25			1800
	450			0.2222			
IRH 500F	400	100	0.25	B [±0.1] D [±0.5] F [±1.0]			2450
	450		0.2222				
	500		0.2				
IRH 800F	400	100	0.25		B [±0.1] D [±0.5] F [±1.0]		2450
	450		0.2222				
	500		0.2				

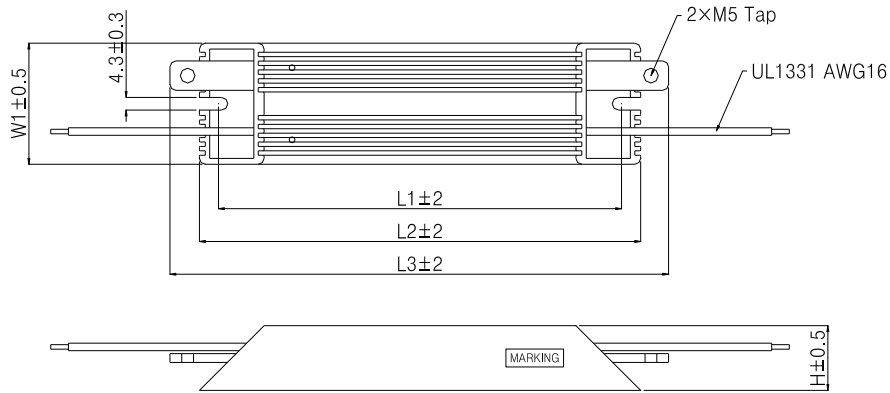
※ Contact us for UL certified product.

## CHARACTERISTICS

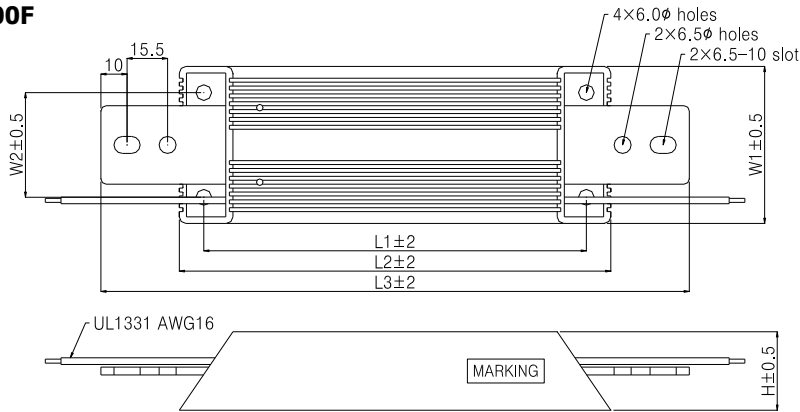
Test	Condition	
Temperature Range	+25°C ~ +100°C	
Insulation Resistance	Min. 100MΩ (DC 500V)	
Dielectric Withstanding Voltage	AC 500V for 1minute. (Leakage current : Max. 2mA)	
Temperature Coefficient	Maximum 15ppm/°C (20°C to 60°C) Maximum 30ppm/°C (20°C to 60°C)	
Short Time Overload	[±0.3%]	5×Power rating 5seconds
Moisture Resistance	[±0.5%]	40°C, 95% RH, DC 100V case to terminal, 500hours
Thermal Shock	[±0.2%]	65°C 30minutes, 90°C 30minutes, 25cycles
Vibration	[±0.2%]	10Hz-55Hz-10Hz(1minute), 2hours each direction
Moisture Load Life	[±0.5%]	40°C, 95% RH, 0.1×Power rating 1.5hours on, 30minutes off, 500hours
Load Life	[±0.5%]	Power rating 1.5hours on, 30minutes off, 500hours
Stability	[±0.1%]	Battery testing time, 1hour

**DIMENSIONS [mm]**

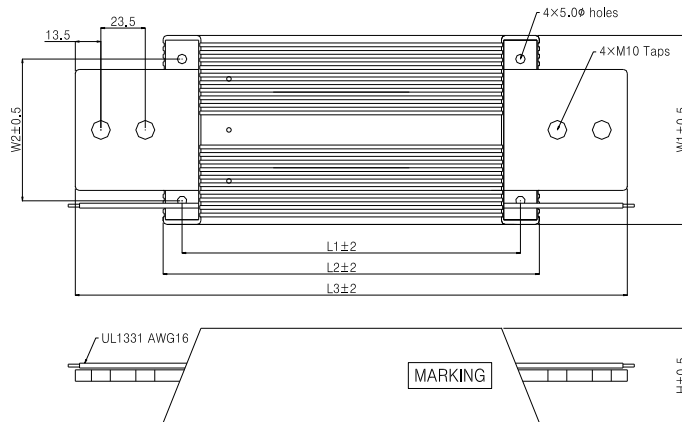
**IRH 80F, 100F**



**IRH 200F, 300F, 500F**



**IRH 800F**



Model	L1±2	L2±2	L3±2	W1±0.5	W2±0.5	H±0.5
IRH 80F	137	150	170	41	-	22
IRH 100F	152	165	185	41	-	22
IRH 200F	146	165	225	60	40	30
IRH 300F	196	215	275	60	40	30
IRH 500F	316	335	395	60	40	30
IRH 800F	179	199	292	75	100	50