

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 zig, 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 Value[mΩ]	Tolerance [%]	Weight [g]
IRH / ULH 300F	500	100	0.2000	B [±0.1] D [±0.5] F [±1.0]	1300
	400	100 / 50	0.2500 / 0.1250		1180
	300		0.3333 / 0.1666		1100
IRH / ULH 200F	250	100	0.4000		680
	200		0.5000		
	150		0.6666		
	100		1.0000		
IRH / ULH 100F	75		1.3333		310
IRH / ULH 80F	30 / 40 / 50 / 75		3.3333 / 2.5 / 2 / 1.3333		200

CHARACTERISTICS

Values in [] mean change in Ω after test

Temperature Range			-25°C ~ +100°C
Insulation Resistance			100MΩ minimum
Dielectric Withstanding Voltage			AC 500V for 1 minute
Temperature Coefficient			Maximum 15ppm/°C [20°C to 60°C] Maximum 30ppm/°C [20°C to 60°C]
Short Time Overload	[±0.3%]		5 X Power rating 5 seconds
Moisture Resistance	[±0.5%]		40°C, 95% RH, DC100V case to terminal, 500 hours
Thermal Shock	[±0.2%]		65°C 30 minutes, 90°C 30 minutes, 25 cycles
Vibration	[±0.2%]		10Hz-55Hz-10Hz(1 minute), 2 hours each direction
Moisture Load Life	[±0.5%]		40°C, 95% RH, 0.1XPower rating 1.5 hours on, 30 minutes off, 500 hours
Load Life	[±0.5%]		Power rating 1.5 hours on, 30 minutes off, 500 hours
Stability	[±0.1%]		Battery testing time, 1hour

DIMENSIONS [mm]

Model	L1±2	L2±2	L3±2	W1±0.5	W2±0.5	H±0.5
IRH / ULH 300F	196	215	275	60	40	30
IRH / ULH 200F	146	165	225	60	40	30
IRH / ULH 100F	152	165	185	41	-	22
IRH / ULH 80F	137	150	170	41	-	22