

# IRBT (Metal Clad Wire Wound Resistors for Automobile)

## [Preliminary]

The IRBT models are metal clad, wire wound resistors for Vehicle, EV(Electric Vehicle), HEV(Hybrid Electric Vehicle), PHEV(Plug-in Hybrid Electric Vehicle). These models controls inrush current through PRA(Power Relay Assembly)

#### GENERAL SPECIFICATIONS

Model	Rated Power [W] Forced cooling	*Resistance Range[ $\Omega$ ]	Tolerance [%]
IRBT60	60	1 ~ 1K	J[±5%] K[±5%]

<sup>\*</sup> Also available in extended ohmic ranges

#### CHARACTERISTICS

Values in [] mean Change in  $\Omega$  After Test

Test		Condition
Temperature Range		- 55 ~ +155℃
Insulation Resistance		20MΩ minimum
Dielectric Strength		AC1000V for 1min (Max leakage current : 2mA)
TCR		Max ± 260ppm/℃
Short Time Overload	$\pm [2\% + 0.05\Omega]$	5 X Power rating, 5 sec
Moisture Resistance	$\pm[3\%+0.05\Omega]$	40°C / RH95% 500 Hours, DC100V Case to Terminal
Thermal Shock	$\pm [3\% + 0.05\Omega]$	Power Rating 30min, -25°C 15Min
Vibration	±[1%+0.05Ω]	MIL-STD-202, 204 methods tested (10HZ gradually increase to 2000HZ)
Shock	$\pm$ [0.2%+0.05Ω]	MIL-STD-202, 213 methods tested (100g, pulse duration: 6ms, Sawtooth wave.)
Moisture Load Life	±[3%+0.05Ω]	40°C / RH95% Power Rating x 0.1, 1.5 Hours On, 0.5 Hours Off for 1000 Hours +65°C, +25°C, -10°C / RH95% power rating x 0.1, 1.0 Hours On, 1.0 Hours Off for 2500 Hours
Load Life	±[3%+0.05Ω]	Power rating 1.5 Hours on, 30 min Off 1000 Hours

## **■ DIMENSIONS[mm]**

### ORDERING PROCEDURE EXAMPLE

