# (RARA) IRBT

## **IRBT Metal Clad Wire Wound Resistors** Automotive[Preliminary]

The IRBT models are metal clad, wire wound resistors for vehicles, EVs(Electric Vehicle), HEVs(Hybrid Electric Vehicle), PHEVs(Plug-in Hybrid Electric Vehicle) . These models control inrush current through PRAs.(Power Relay Assembly)

### **GENERAL SPECIFICATIONS**

Model	Rated Power [W] Forced cooling	*Resistance Range[Ω]	Tolerance [%]
IRBT60	60	1 ~ 1K	J[±5%] K[±10%]

\* Also available in extended ohmic ranges

### CHARACTERISTICS

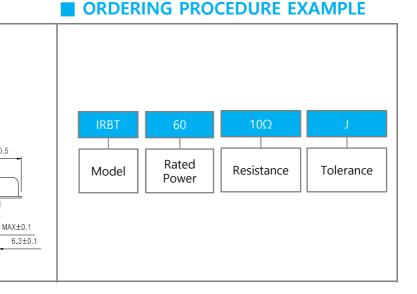
Values in [] mean Change in  $\Omega$  After Test

Test	Condition		
Temperature Range		- 55 ~ +155℃	
Insulation Resistance		20MΩ minimum	
Dielectric Strength		AC1000V for 1min (Max leakage current : 2mA)	
TCR		Max ± 260ppm/°C	
Short Time Overload	±[2%+0.05Ω]	5 X Power rating, 5 sec	
Moisture Resistance	±[3%+0.05Ω]	40°C / RH95% 500 Hours, DC100V Case to Terminal	
Thermal Shock	±[3%+0.05Ω]	Power Rating 30min, -25°C 15Min	
Vibration	±[1%+0.05Ω]	MIL-STD-202, 204 methods tested (10HZ gradually increase to 2000HZ)	
Shock	±[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	

5.5±0.5

1土0.1

12.5±1



**DIMENSIONS[mm]** 

100±1

Marking

76±1

56±1.5

12.5±1

33.5±0.5

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**RARA Electronics LLC**