

# 3R-250

250Watt Mountable Non-Inductive,  
High Frequency Resistors



3R Lab

## Motor Controls, High Energy, RF, High Voltage, Inverters, Pulse & Plasma, Non-Inductive Powers

3R-250 Non-Inductive design these elements are ideally suited for high frequency and pulse load applications. By direct mounting on a heatsink significant cost advantages can be realized for power Application from 100w to 600w. 3R-250 can be supplied in a 2-terminal Main applications are Variable speed Drives, ship, train, RF Termination, Power Supplies, Control Devices, Telecom, Robotics, Motor Controls Dynamic Braking, and other switching designs.

### 3R-250 Non-Inductive 250Watt Mountable, High Frequency Resistors

- Heat Sink Mountable with M4 Screw
- RF Terminal
- Shunt
- Inverter
- Motor Braking
- Pulse & Plasma



## SPECIFICATIONS

**Resistance Values :** 1R0 to 2Megohm others on request

**Resistance Tolerance :**  $\pm 10\%$  Std. ,1%,2%,5% available on request.

**Temperature Coefficient :**  $\pm 100\text{ppm}/^\circ\text{C}$  typ. (others upon request)

**Maximum Working Voltage :** 5,000V DC, higher voltage on request, not exceeding max. power

**Single Shot Voltage :** Up to 12kV at std. wave (1.5/50  $\mu\text{s}$ )

**Insulation Resistance :** 10G $\Omega$  min. at 500V

**Creeping Distance :** 42mm min.

**Inductance :**  $\leq 50$  nH

**Capacity/Ground :**  $\leq 110\text{pF}$

**Capacity/Resistive :**  $\leq 40\text{pF}$

**Operation Temperature :**  $-55^\circ\text{C}$  to  $+155^\circ\text{C}$

**Max. Torque for Contacts :** 2 N.m

**Max. Torque for Mounting :** 1.8 N.m

**Power Rating :** 250W at  $50^\circ\text{C}$  Tap Temperature

**Higher power :** 600Watt at  $5^\circ\text{C}$  Tap Temperature

**Dielectric Strength :** Up to 12 kV

**Termination to Contacts :** M5 Screws

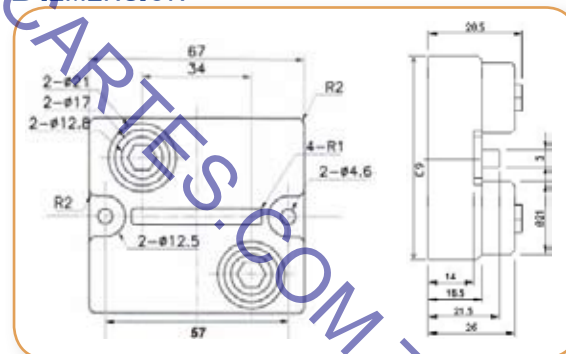
**Required thermal transfer compound of-heat conductivity :** 1 W/ $^\circ\text{C}$

**Required flatness of heat sink :**  $\leq 0.05\text{mm}$

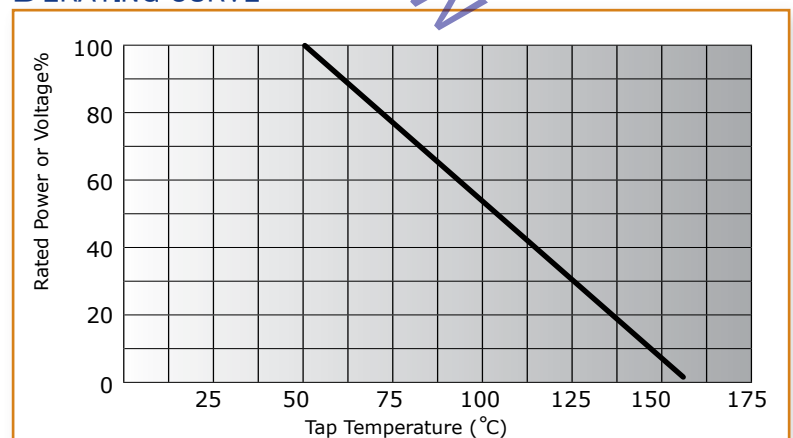
**Roughness of the Heatsink surface :**  $\leq 6.4\mu\text{m}$ .

**Isolation Voltage(Terminal to Heatsink) :** 7k Vrms

## DIEMENSION



## DERATING CURVE



cf.: The described specifications & dimensions subject to change without notice.



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