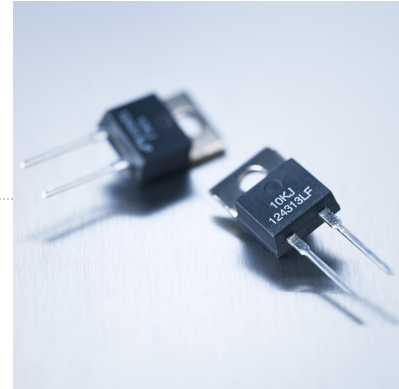


Series MXP 35 TO-220

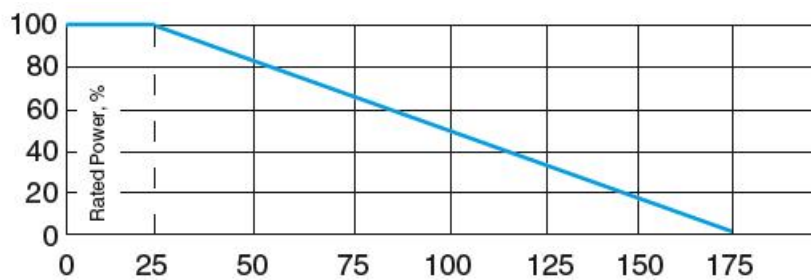
35 W Thick Film Resistor for high-frequency and pulse-loading applications

- 35 W operating power
- TO-220 package configuration
- Single-screw mounting simplifies attachment to heat sink
- Non-Inductive design
- ROHS compliant
- Materials in accordance with UL 94 V-0



Product Detail:

1. Derating

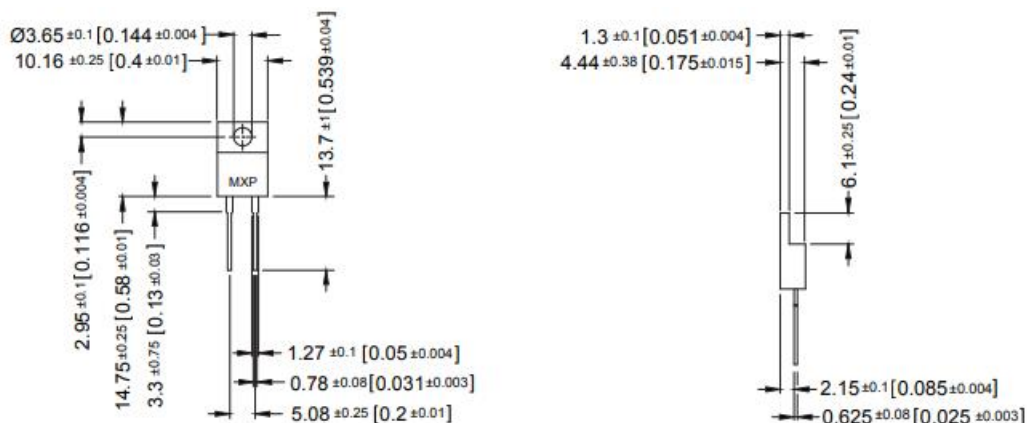


Derating (thermal resist.) MXP-35: 0.23 W/K (4.28 K/W)

Without a heat sink, when in open air at 25°C, the MXP-35 is rated for 2.50 W. Derating for temperature above 25°C is 0.02 W/K.

Case temperature must be used for definition of the applied power limit. Case temperature measurement must be done with a thermocouple contacting the center of the component mounted on the designed heat sink. Thermal grease should be applied properly.

2. Dimensions in millimeters



3. Specifications

Resistance ranges: $0.05 \Omega \leq 1 \text{ M}\Omega$ (other values on special request)

Resistance Tolerance: $\pm 1 \%$ to $\pm 10 \%$

$\pm 0.5 \%$ on special request for limited ohmic values

Temperature Coefficient: $< 3 \Omega$: ask for details

$\geq 3 \Omega < 10 \Omega$: $\pm 100 \text{ ppm} + 0.002 \Omega/^\circ\text{C}$

$\geq 10 \Omega$: $\pm 50 \text{ ppm}/^\circ\text{C}$ (referenced to 25°C , ΔR taken at $+85^\circ\text{C}$)

Power rating: 35 W at 25°C bottom case temperature

Maximum operating voltage: 350 V

Dielectric strength voltage: 1,800 V AC

Insulation resistance: $> 10 \text{ G}\Omega$ at 1,000 V DC

Momentary overload : 2x rated power with applied voltage not to exceed 1.5x maximum continuous operating voltage for 5 sec. $\Delta R \pm (0.3 \% + 0.01 \Omega)$ max.

Moisture resistance: MIL-STD-202, method 106 $\Delta R = (0.5 \% + 0.01 \Omega)$ max.

Thermal shock: MIL-STD-202, method 107, Cond. F, $\Delta R = (0.3 \% + 0.01 \Omega)$ max

Working temperature range: -55°C to $+175^\circ\text{C}$

Load life: MIL-R-39009, 2,000 hours at rated power, $\Delta R \pm (1.0 \% + 0.01 \Omega)$ max.

Terminal strength: MIL-STD-202, method 211, Cond. A (Pull Test) 2.4 N, $\Delta R = (0.2 \% + 0.01 \Omega)$ max.

Vibration, high frequency: MIL-STD-202, method 204, Cond. D, $\Delta R = (0.2 \% + 0.01 \Omega)$ max.

Lead material: tinned copper

Torque: 0.7 Nm to 0.9 Nm

Heat resistance to cooling plate: $R_{th} < 4.28 \text{ K/W}$

Weight: $\sim 2 \text{ g}$

4. Ordering Information

Type	ohmic Value	TOL
MXP35	100R	5%