EBG RESISTORS

A Miba Group Company

Power Resistors

Series MXP 35 TO 220

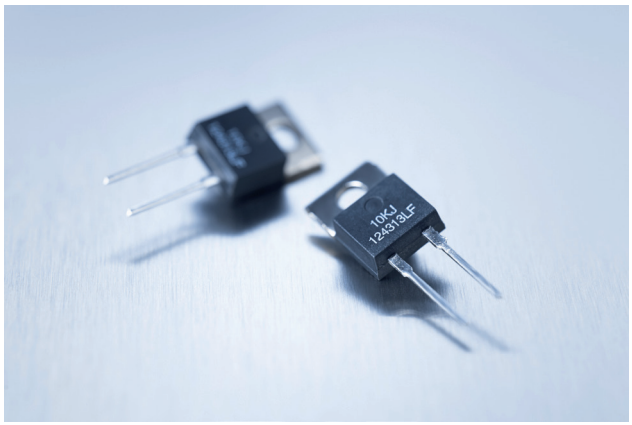
35 W Thick Film Power Resistors for high-frequency and pulse-loading applications

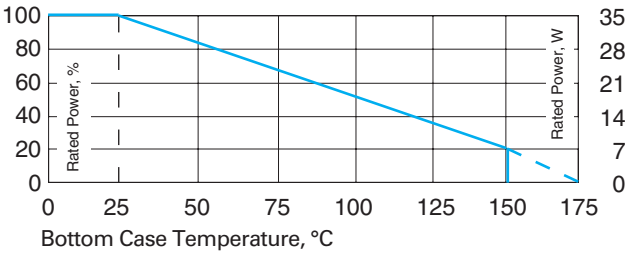
General Characteristics

- 35 W power rating at 25°C
- TO-220 package configuration
- Single-screw mounting simplifies attachment to heat sink
- Heat resistance to cooling plate: Rth< 4.28 °K/W
- Molded case for environmental protection.
- Resistor element is electrically insulated from the metal sink tab.
- Standard lead form for easier fit.

Specifications

- Resistance range: 0.05 Ω to 1 MΩ, other values upon request
- Resistance tolerance: ±1% to ±10% (0.5% upon request)
- Temperature coefficient: 10 Ω and above, ±50 ppm/°C, referenced to 25°C, ΔR taken at +105°C.
  Between 3 Ω and 10 Ω, ±(100 ppm+0.002 Ω)/°C, referenced to 25°C, ΔR taken at +105°C., < 3 Ω please ask for details.
- Max. operating voltage: 350 V
- Dielectric strength: 1,800 V AC
- Insulation resistance: 10 GΩ min.
- Momentary overload: 2 times rated power with applied voltage not to exceed 1.5 times maximum continuous operating voltage for 5 seconds, ΔR ±(0.3% + 0.01 Ω) max.
- Load life: MIL-R-39009, 2,000 hours at rated power, ΔR ±(1.0% + 0.01 Ω).
- Power rating: depends on case temperature. See derating curve.
- Moisture resistance: MIL-Std-202, Method 106, ΔR = (0.5% + 0.01 Ω) max.
- Thermal shock: MIL-Std-202, Method 107, Cond. F, ΔR = (0.3% + 0.01 Ω) max.
- Working temperature range: –55°C to +175°C
- Terminal strength: MIL-Std-202, Method 211, Cond. A (Pull Test) 2.4N, ΔR = (0.2% + 0.01 Ω) max.
- Vibration, high frequency: MIL-Std-202, Method 204, Cond. D, ΔR = (0.2% + 0.01 Ω) max.
- Lead material: tinned copper
- Maximum torque: 0.9 Nm
- For pulse power details, please see page 32 (datasheet UXP-300)!



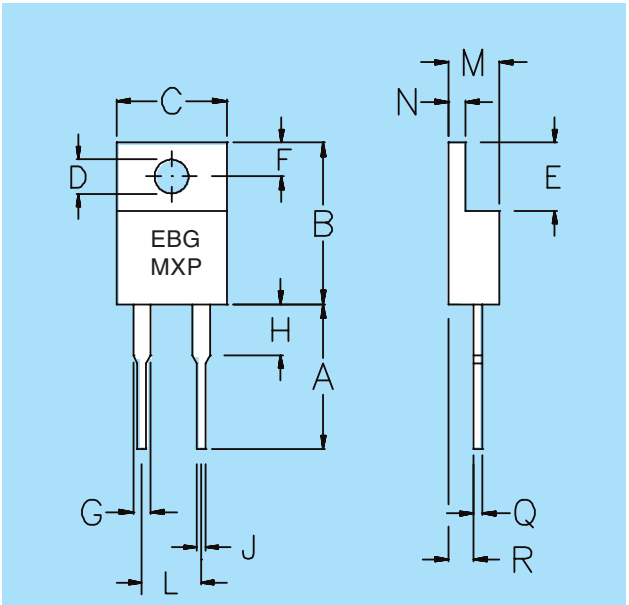


Derating (thermal resistance): 0.23 W/°K (4.28°K/W)

Without a heat sink, when in open air at 25°C, the MXP 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 made with a thermocouple contacting the center of the component mounted on the designed heat sink. Thermal grease should be applied properly.

Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	12.70	14.70	0.500	0.579
B	14.50	15.00	0.571	0.591
C	9.91	10.41	0.390	0.410
D	3.55	3.75	0.139	0.148
E	5.85	6.35	0.230	0.250
F	2.85	3.05	0.112	0.120
G	1.17	1.37	0.046	0.054
H	-.–	4.00	-.–	0.157
J	0.70	0.86	0.027	0.034
L	4.83	5.33	0.190	0.210
M	4.06	4.82	0.159	0.190
N	1.20	1.40	0.047	0.055
Q	0.55	0.70	0.022	0.028
R	2.05	2.25	0.080	0.089



The above spec. sheet features our standard products. For further options, please contact our local EBG representative or contact us directly. For updated information, please visit our website!