

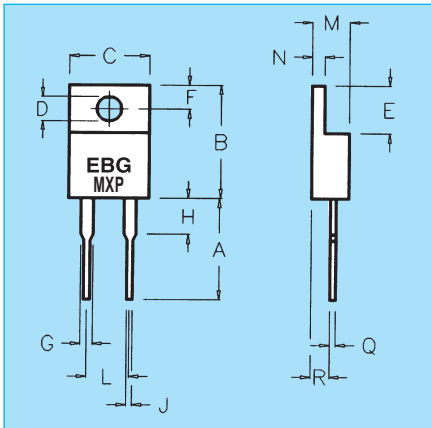
# Power Resistors

## Series MXP 35 TO 220

### 35 Watt Thick Film Power Resistors for High Frequency and Pulse Loading Applications

The special performance features of the Type MXP include:

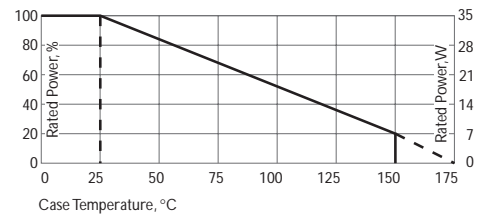
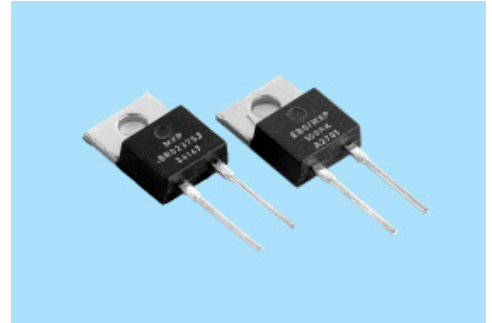
- 35 Watt power rating at 25°C
- TO-220 package configuration
- Single screw mounting simplifies attachment to heat sink
- Heat resistance to cooling plate:  $R_{th} < 4.28 \text{ }^\circ\text{K/W}$
- A molded case for environmental protection.
- Resistor element is electrically insulated from the metal sink tab.
- Standard lead form for easier fit.



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

#### Specifications:

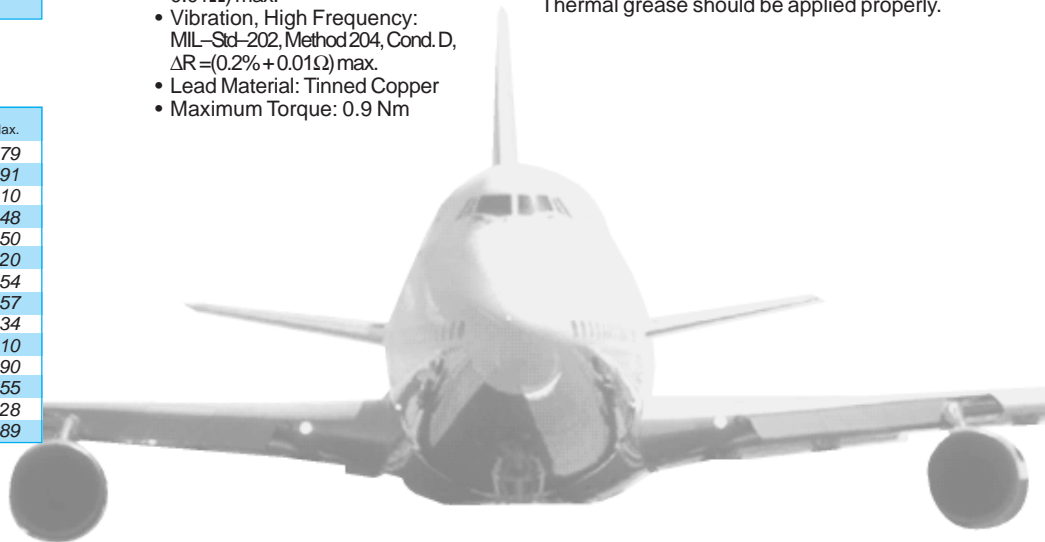
- Resistance Range: 0.05Ω to 1MΩ other values on request
- Resistance Tolerance: ±1% to ±10% (0.5% on request)
- Temperature Coefficient: 10Ω and above, ± 50ppm/°C, referenced to 25°C, ΔR taken at +105°C. Between 1Ω and 10Ω, ± (100ppm+0.002Ω)/°C, referenced to 25°C, ΔR taken at +105°C.
- Max. Operating Voltage: 350V
- Dielectric Strength: 1,800VAC
- Insulation Resistance: 10GΩ 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% + 0.01Ω) max.
- Load Life: MIL-R-39009, 2,000 hours at rated power, ΔR ±(1.0% + 0.01Ω).
- Power Rating: Depends upon case temperature. See Derating Curve.
- Moisture Resistance: MIL-Std-202, Method 106, ΔR =(0.5% + 0.01Ω) max.
- Thermal Shock: MIL-Std-202, Method 107, Cond. F, ΔR =(0.3% + 0.01Ω) 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% + 0.01Ω) max.
- Vibration, High Frequency: MIL-Std-202, Method 204, Cond. D, ΔR =(0.2% + 0.01Ω) max.
- Lead Material: Tinned Copper
- Maximum Torque: 0.9 Nm



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

Without a heatsink, when in free air at 25°C, the MXP is rated for 2.50W. Derating for temp. above 25°C is 0.02W/°K.

The case temperature is to be used for the definition of the applied power limit. The 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.



In the above spec sheet, you will find our standard product, please contact your local manufacturing representative or call us direct to find out details of other options available regarding this style: