



POWER RESISTORS

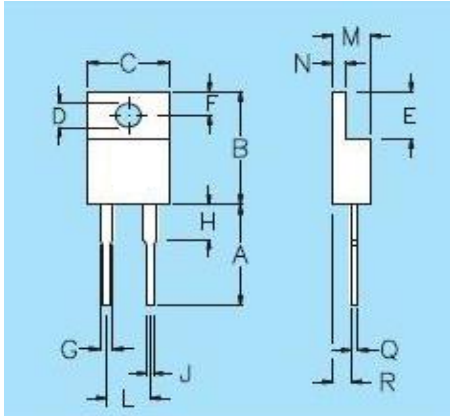
RMP35 TO-220 Flange Plate Power Resistors (thick film, non-inductive design)

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

Technical characteristics:

- ✧ 35W power rating at 25°C
- ✧ Standard TO-220 package, flange plate mounting.
- ✧ Plate mounting with single M3 screw.
- ✧ Resistor element is electrically insulated from the metal heat sink.
- ✧ Standard lead form for easy assembly.
- ✧ Pulse load capability, refer to “Rongtech power resistor pulse load characteristics”.

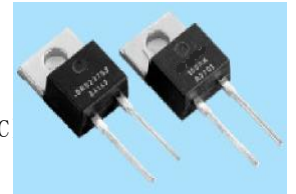
Dimensions:



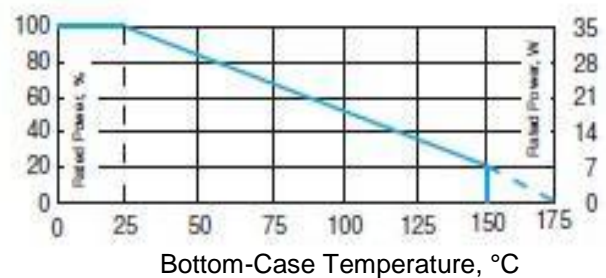
Dim.	Min (mm)	Max (mm)
A	12.70	14.70
B	14.50	15.00
C	9.91	10.41
D	3.55	3.75
E	5.85	6.35
F	2.85	3.05
G	1.17	1.37
H	-----	4.00
J	0.70	0.86
L	4.83	5.33
M	4.06	4.82
N	1.20	1.40
Q	0.55	0.70
R	2.05	2.25

Specifications:

- ✧ Resistance: 0.2Ω ~ 1MΩ
- ✧ Tolerance: ±1% ~ ±10% (±0.5% on request)
- ✧ TCR: ±50ppm/°C (25°C ~ 105°C)
- ✧ 35W power rating at 25°C
- ✧ Max operating voltage: 350VDC.
- ✧ Dielectric strength: 1,800VAC
- ✧ Insulation resistance: 10GΩ, min.
- ✧ Momentary overload: 2 times rated power, but no more than 1.5 times Max continuous operating voltage, last 5s, $\Delta R \leq \pm(0.3\%R + 0.001\Omega)$.
- ✧ Load life: 2,000 hours at rated power, MIL - R - 39009D $\Delta R \leq \pm(1.0\%R + 0.001\Omega)$.
- ✧ Moisture resistance: MIL - Std - 202, method 106, $\Delta R \leq \pm(0.5\%R + 0.001\Omega)$.
- ✧ Thermal shock: MIL - Std - 202, method 107, Cond. F, $\Delta R \leq \pm(0.3\%R + 0.001\Omega)$.
- ✧ Terminal strength: MIL - Std - 202, method 211, Cond. A, (pull test) 2.4N, $\Delta R \leq \pm(0.2\%R + 0.001\Omega)$.
- ✧ Vibration, high frequency: MIL - Std - 202, method 204, Cond. D, $\Delta R \leq \pm(0.2\%R + 0.001\Omega)$.
- ✧ Working temperature: -55°C ~ +175°C
- ✧ Lead material: tinned copper



Power derating curve (power VS BCT)



Remark:

- 1, derating curve slope (thermal resistance) : 0.23W/°K (4.28°K/W)
Refer to [Rongtech power resistor cooling requirements](#)”
- 2, without heat sink at 25°C, MXP35 rated power is 2.50W, above 250°C, derating is 0.2W/°C

Applicable standard:

IEC60115-1: 2001 (GB/T5729-2003)
MIL-STD-202
MIL - R - 39009D

Order example:

Model	R	TOL	TCR
MXP35	50R	5%	150PPM