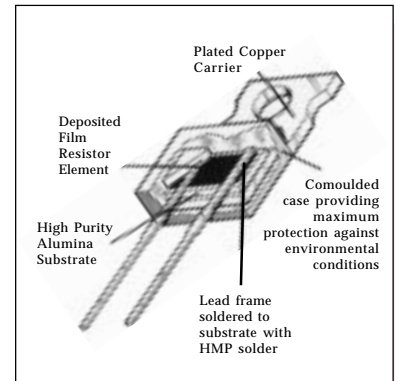


Key features

- **small size (TO220)**
- **easy to mount**
- **non inductive**
- **high frequency range up to 300MHz**
- **20 watts on heatsink**
- **voltage proof to 2000 V ac**
- **non flammable**



Power Resistors

type MPR series

This small size non-inductive, high power resistor is an innovative and significant first for Meggitt Electronics. Occupying a standard TO220 package it is ideally suited to positions where high power dissipation and , small size and close tolerance are key design requirements. The film provides excellent frequency characteristics and resistance tolerance down to $\pm 1\%$

Specification

Electrical

Resistance Range:	0.22R - 51K
Resistance Tolerance:	E24 - 1%, E12 - 5%
Temperature Coefficient of Resistance:	50, 100, 250 ppm/ $^{\circ}$ C
Rated Power (On Suitable Heatsink):	20 Watts
Rated Power (W/O Heatsink):	2 Watts
Equivalent Parallel Capacitance (100MHz):	1.0 pF
Maximum Operating Voltage:	500 V dc
Dielectric Withstand Voltage: (Between Terminal and Heatsink)	2000 V dc
Operating Temperature Range:	-55 $^{\circ}$ C to +155 $^{\circ}$ C
Rated Ambient Temperature:	-25 $^{\circ}$ C to +40C

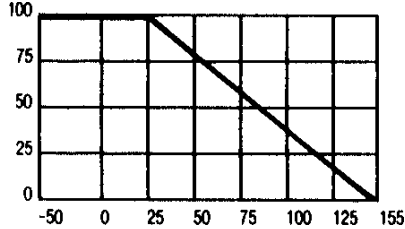
Environmental

Test Type	Test Condition	Specification
Life (Rated Power):	40 $^{\circ}$ C, Rated Power, 90 Min On 30 Min off, 1000 Hours	$\pm (1.0\% + R05)$
Life (moisture Load):	60 $^{\circ}$ C, 90-95% RH, Rated Power 90 Min ON, 30 Min OFF, 1000 Hours	$\pm (1.0\% + R05)$
Temperature Cycling:	Room Temperature >-55 $^{\circ}$ C 30 Min> RT 10 Min $\pm 120^{\circ}$ C, 30 Min > RT 10 Min, 5 Cycles	$\pm (0.25\% + R05)$
Short Term Overload:	Rated Voltage x 2,5, 5 seconds	$\pm (0.25\% + R05)$
Soldering Heat:	350C Solderpot, 3 Seconds	$\pm (0.1\% + R05)$
Insulation resistance:	DC 100V, 1 Min	Over 1000M ohms
Vibration:	10 - 50 Hz, 1 Min, 20G X-Y-Z 1 Hour	$\pm (0.5\% + R05)$

radial thin film - 20 watts

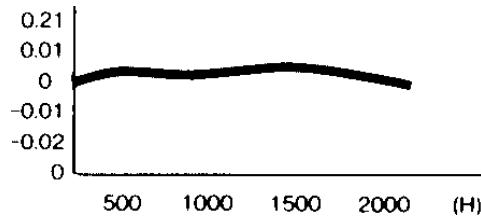
Environmental cont.

Power Derating Curve



With a 5.8°C/W heatsink or better at a 25°C ambient temperature, 20 watts can be dissipated. A larger heatsink will run the resistor at a lower temperature.

Load Life in High Temperature & Humidity

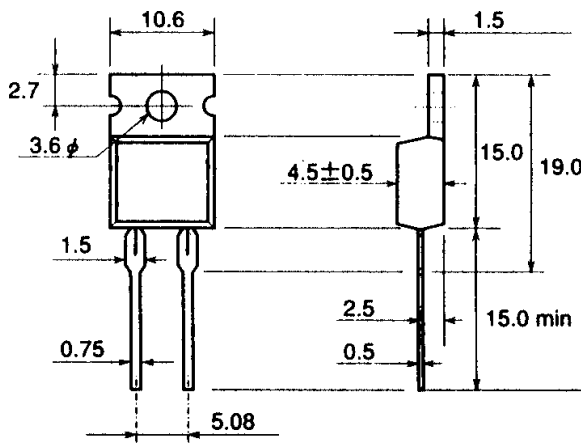


Power Resistors

type MPR series

This series is an ideal solution for the output side of high speed pulse generators, a surge absorption resistor in switch mode power supplies and for monitors, display terminals, scientific work-stations and other brown and white goods. The MPR is available in a wide range of values.

Dimensions



How To Order

MPR	20	C	1R0	J
Common Part	Wattage Rating at 25°C with Heatsink	Temp Coefficient Of Resistance	Resistance Value	Tolerance
MPR - High Power Film Resistor	20 - 20 Watts	C - 50ppm/°C A - 100ppm/°C H - 250ppm/°C	1.0 ohm (1000 mille ohms) 1R0 1K ohm (1000 ohms) 1K0 10K ohm (10000 ohms) 10K	F - 1% J - 5%

Please Request Full Data Sheet F0480