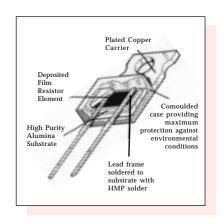
### radial thin film - 20 watts

### **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**

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

### **Environmental**

Test Type	Test Condition	Specification
Life (Rated Power):	40°C, Rated Power, 90 Min On	$\pm (1.0\% + R05)$
	30 Min off, 1000 Hours	
Life (moisture Load):	60°C, 90-95% RH, Rated Power	$\pm (1.0\% + R05)$
	90 Min ON, 30 Min OFF, 1000 Hours	
Temperature Cycling:	Room Temperature >-55°C 30 Min> RT	$\pm (0.25\% + R05)$
	10 Min ±120°C, 30 Min > RT 10	
	Min, 5 Cycles	
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	$\pm (0.5\% + R05)$

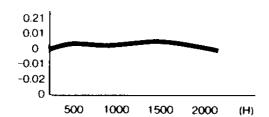
### **Environmental cont.**



### **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**

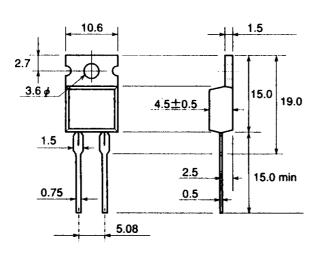


### **Power Resistors**

# 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	I A - IUUDDDM/ C. I	1.0 ohm (1000 mille ohms) 1R   1K ohm (1000 ohms) 1K   10K ohm (10000 ohms) 10	0

Please Request Full Data Sheet F0480

