



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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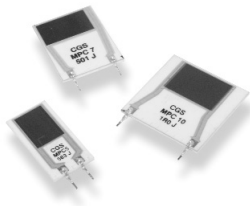
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



High Power Resistors

Type MPC Series

Type MPC Series



A range of non inductive thick film power resistors complementing the T0220 packaged MPR series (20 Watt heat sink styles), being vertically mounted and suitable to dissipate power from 3 Watts up to 10 Watts. Available in values from 1R0 to 200K ohms they are the idea solution for small snubber circuits, the output side of high speed pulse generators and low inductive resistor requirements in switch mode power supplies.

Key Features

- High Power Density
- Easy to Mount
- Non Inductive
- Stable at 100ppm/°C
- Temperature Range -55°C to +125°C
- High Power up to 10 Watts
- Voltage Proof 5000V dc
- Non Flammable

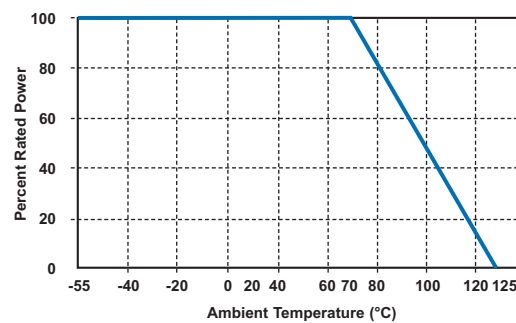
Characteristics - Electrical

Resistance Values:	R10 to 200K
Resistance Tolerance:	1%, 5%
Temp. Coefficient of Resistance:	±100ppm/°C
Rated Power @ 70°C:	3 to 10 Watts nominal
Equivalent Parallel Capacitance (100 MHz):	1.0pf
Maximum Operating Voltage:	300V AC
Withstanding Voltage:	5000V
Operating Temperature Range:	-55°C to +125°C
Overload Current:	20 x rated current up to 8 ms ($\Delta R \pm 0.5\%$)

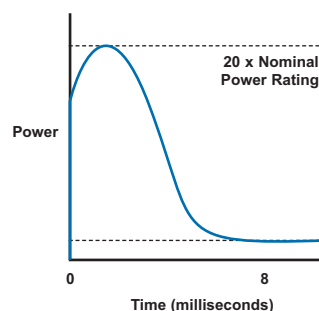
Characteristics - Mechanical

	Test Condition MILR83401	Specification
Life (Rated Power):	40°C, rated power, 90 min ON 30 min OFF, 1000 hrs.	$\Delta R \pm (1.0\% + 0.05 \text{ ohm})$
Life (Moisture Load):	60°C, 90 - 95% RH, rated power 90 min ON 30 min OFF, 1000 hrs.	$\Delta R \pm (1.0\% + 0.05 \text{ ohm})$
Temperature Cycling:	Room temp > -55°C 30 min > RT 10 min \pm 120°C 30 min > RT 10 min 5 cycles	$\Delta R \pm (0.25\% + 0.05 \text{ ohm})$
Flammability:	UL94V-O rated	
Soldering Heat:	350°C Solderpot, 3 secs.	$\Delta R \pm (0.25\% + 0.05 \text{ ohm})$
Insulation Resistance:	DC 100V, 1 min	Over 1000M ohm
Vibration:	10 - 50 Hz, 1 min, 20G, X-Y-Z 1 hr.	$\Delta R \pm (0.25\% + 0.05 \text{ ohm})$

Power Derating Curve



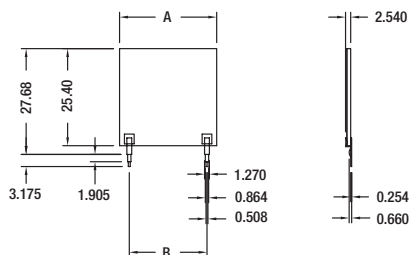
Overload Characteristics



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Dimensions



Size	MPC3	MPC5	MPC7	MPC10
A	10.16	12.7	19.05	25.4
B	5.08	5.08	12.70	20.32

Product Marking

Value (Ohms)	1	2	5	10	20	50	100	200	500	1K	2K	5K	10K	20K	50K	100K	200K
Code	1R0	2R0	5R0	100	200	500	101	201	501	102	202	502	103	203	503	104	204

How to Order

MPC	52	1K0	J
Common Part	Power Rating / Size	Resistance Value	Tolerance
MPC - Thick Film Planar Resistor	32 - 3 Watts 52 - 5 Watts 75 - 7 Watts 108 - 10 Watts	See code in table above	F $\pm 1\%$ J $\pm 5\%$

NB: Due to the wide range of available values/tolerances etc. some variants may not be tooled for production. It is possible that a small tooling charge may be levied dependant on order quantity or potential. Please check.