



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

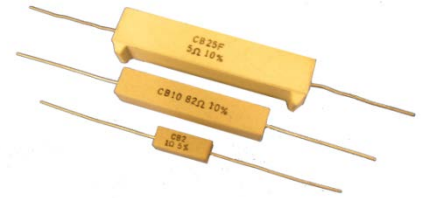
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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



Features:

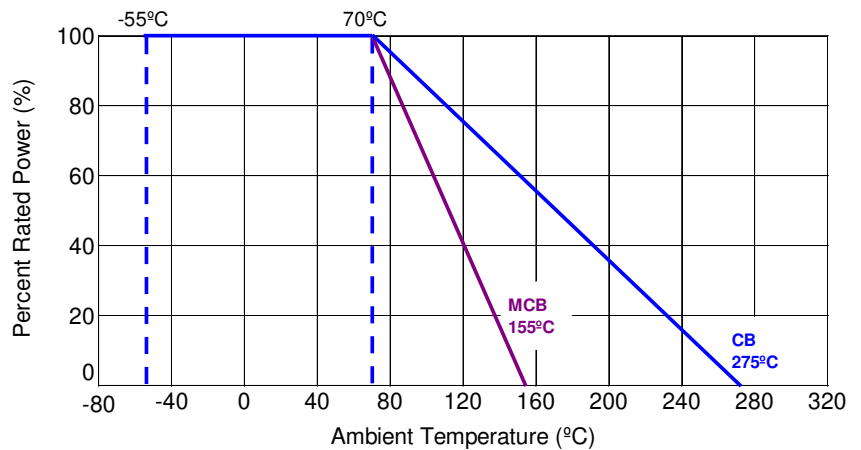
- Fireproof power resistor
- High thermal conductivity
- "M" in MCB stands for Metal Oxide element
- Standoffs may be available (CBF, MCBF). Contact factory for details.
- RoHS compliant / lead-free



Electrical Specifications					
Type/Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (V)	Maximum Overload Voltage (V)	TCR (ppm/°C) (*)	Ohmic Range (Ω) and Tolerance
					5%, 10%
CB2	2W	250	500	± 800 ppm/°C	0.056 - 0.1
				± 500 ppm/°C	0.12 - 0.2
				± 200 ppm/°C	0.22 - 100
CB3	3W	300	600	± 800 ppm/°C	0.1
				± 500 ppm/°C	0.12 - 3
				± 200 ppm/°C	3.3 - 100
CB5	5W	350	700	± 800 ppm/°C	0.1 - 0.15
				± 500 ppm/°C	0.18 - 0.68
				± 200 ppm/°C	0.75 - 470
CB7	7W	500	1000	± 800 ppm/°C	0.39 - 0.51
				± 500 ppm/°C	0.56 - 0.82
				± 200 ppm/°C	0.91 - 470
CB10	10W	700	1400	± 800 ppm/°C	0.51 - 1
				± 500 ppm/°C	1.1 - 2.7
				± 200 ppm/°C	3 - 680
CB15	15W	700	1400	± 800 ppm/°C	0.56 - 1
				± 500 ppm/°C	1.3 - 3
				± 200 ppm/°C	3.6 - 820
MCB3	3W	300	600	± 200 ppm/°C	110 - 51K
MCB5	5W	350	700	± 200 ppm/°C	110 - 51K
MCB7	7W	500	1000	± 200 ppm/°C	510 - 51K
MCB10	10W	700	1400	± 200 ppm/°C	750 - 51K
MCB15	15W	700	1400	± 200 ppm/°C	910 - 51K

(*) Lower TCR may be available for certain values. Contact factory.

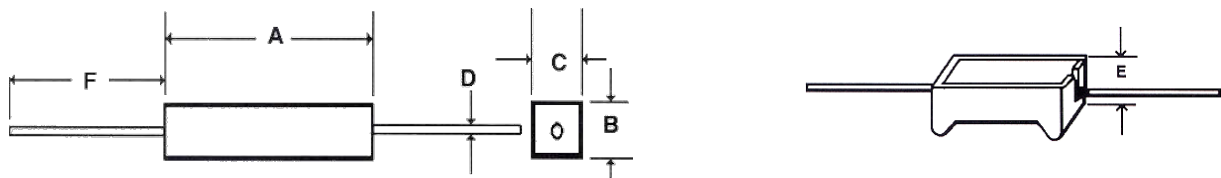
Power Derating Curve:



Performance Characteristics	
Test	Test Results
Moisture Resistance	± 5%
Thermal Shock	± 2%
Load Life @ 70°C - 1,000 hrs.	± 5%
Resistance to Soldering Heat	± 2%
Short Time Overload - 5xPn for 5sec	± 2%
Dielectric Withstanding Voltage	± 2%

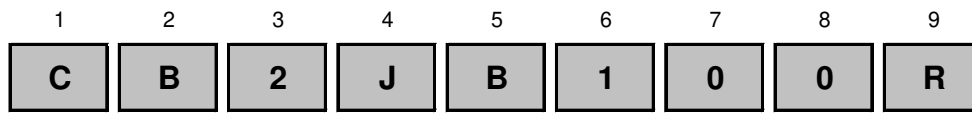
Operating Temperature Range: -55°C to +155°C for MCB, -55°C to +275°C for CB

Mechanical Specifications



Type / Code	A Body Length	B Height	C Width	D Lead Diameter	E (CBF, MCBF only)	F Lead Length	Unit
CB2	0.709 ± 0.047 18.00 ± 1.20	0.252 ± 0.047 6.40 ± 1.20	0.252 ± 0.047 6.40 ± 1.20	0.031 ± 0.004 0.80 ± 0.10	0.299 ± 0.039 7.60 ± 1.00	1.000 min. 25.40 min.	inches mm
CB3, MCB3	0.866 ± 0.047 22.00 ± 1.20	0.315 ± 0.047 8.00 ± 1.20	0.315 ± 0.047 8.00 ± 1.20	0.031 ± 0.004 0.80 ± 0.10	0.374 ± 0.039 9.50 ± 1.00	1.000 min. 25.40 min.	inches mm
CB5, MCB5	0.866 ± 0.047 22.00 ± 1.20	0.374 ± 0.039 9.50 ± 1.00	0.374 ± 0.039 9.50 ± 1.00	0.031 ± 0.004 0.80 ± 0.10	0.437 ± 0.039 11.10 ± 1.00	1.000 min. 25.40 min.	inches mm
CB7, MCB7	1.378 ± 0.059 35.00 ± 1.50	0.374 ± 0.039 9.50 ± 1.00	0.374 ± 0.039 9.50 ± 1.00	0.031 ± 0.004 0.80 ± 0.10	0.500 ± 0.039 12.70 ± 1.00	1.000 min. 25.40 min.	inches mm
CB10, MCB10	1.890 ± 0.059 48.00 ± 1.50	0.374 ± 0.039 9.50 ± 1.00	0.374 ± 0.039 9.50 ± 1.00	0.031 ± 0.004 0.80 ± 0.10	0.500 ± 0.039 12.70 ± 1.00	1.000 min. 25.40 min.	inches mm
CB15, MCB15	1.890 ± 0.059 48.00 ± 1.50	0.512 ± 0.047 13.00 ± 1.20	0.512 ± 0.047 13.00 ± 1.20	0.031 ± 0.004 0.80 ± 0.10	0.626 ± 0.039 15.90 ± 1.00	1.000 min. 25.40 min.	inches mm

How to Order



Product Series		Code	Power	Tolerance		Packaging			Resistance Value
CB	Standard	2	2W	Code	Tol	Code	Description	Size	Quantity
MCB	Standard (Metal Oxide)	3	3W	J	5%	B	Bulk	CB2, CB5, MCB5	1500
CBF	With standoff	5	5W	K	10%			CB3, CB7, CB10, CB15, MCB3, MCB7, MCB10, MCB15	1000
MCBF	With standoff (Metal Oxide)	7	7W						
		10	10W						
		15	15W						

Four characters with the multiplier used as the decimal holder. "L" used as multiplier of 10⁻³ for any value under 0.1 ohm

0.056 ohm = 56L0
0.1 ohm = R100
33 ohm = 33R0
3.32 Kohm = 3K32