

CB Series

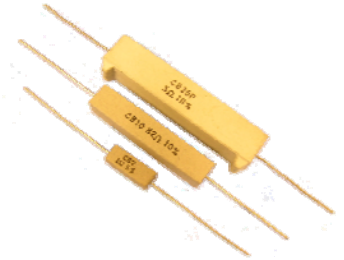
Ceramic Housed with Axial Leads Wirewound Resistor

Stackpole Electronics, Inc.

Resistive Product Solutions

Features:

- Fireproof power wirewound
- High thermal conductivity
- Non-inductive styles available
- Body standoffs available; add "F" after CB
- RoHS compliant / lead-free



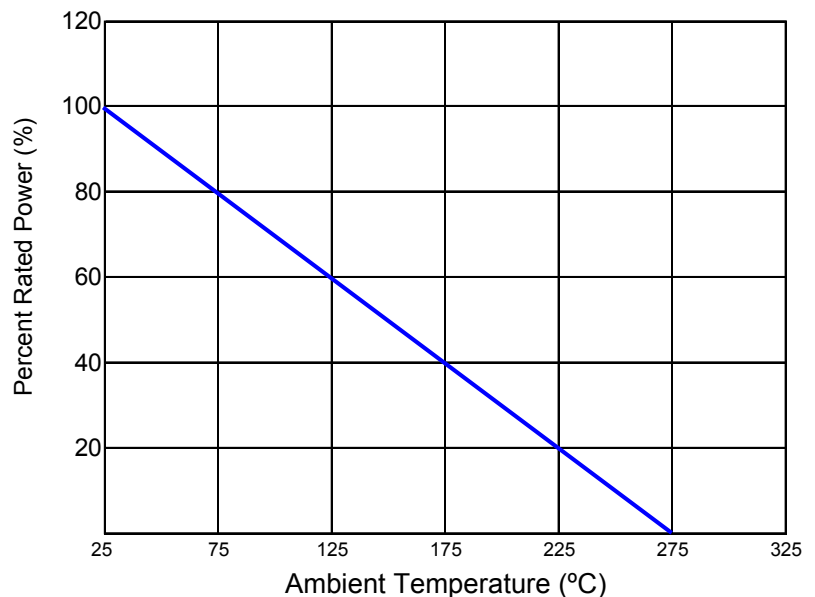
Electrical Specifications					
Type / Code	Power Rating (Watts) @ 70°C	Ohmic Range(Ω) and Tolerance			
		0.5%	1%	5%	10%
CB2	2W	-	-	0.1 - 300	0.1 - 300
CB3	3W	-	-	0.1 - 680	0.1 - 680
CB5	5W	-	-	0.1 - 680	0.1 - 680
CB7	7W	-	-	0.1 - 1.5K	0.1 - 1.5K
CB10	10W	-	-	0.1 - 2K	0.1 - 2K
CB15	15W	-	-	0.15 - 2K	0.15 - 2K
CB20	20W	-	-	0.2 - 2K	0.2 - 2K
CB22	22W	-	-	1 - 250	1 - 250
CB25	25W	-	-	0.2 - 2K	0.2 - 2K
CB30	30W	-	-	1 - 250	1 - 250
WCB2	2W	1 - 5K	0.1 - 5K	0.1 - 5K	-
WCB3	3W	1 - 10K	0.1 - 10K	0.1 - 10K	-
WCB5	5W	1 - 10K	0.1 - 10K	0.1 - 10K	-
WCB7	7W	1 - 15K	0.1 - 15K	0.1 - 15K	-
WCB10	10W	1 - 20K	0.1 - 20K	0.1 - 20K	-
WCB15	15W	1 - 20K	0.1 - 20K	0.1 - 20K	-
MCB3	3W	-	-	1 - 500K	-
MCB5	5W	-	-	1 - 500K	-
MCB7	7W	-	-	1 - 500K	-

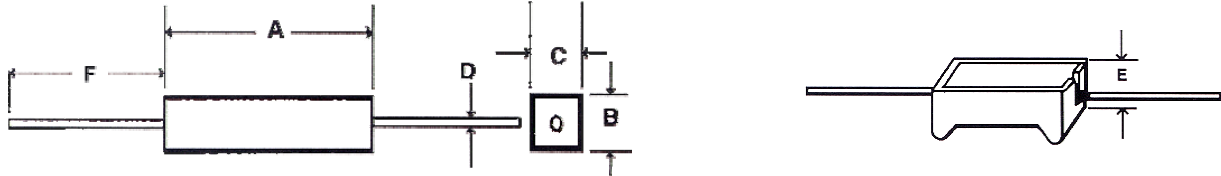
Resistance Temperature Coefficient Standard:

CB series: ±800ppm below 1Ω & ±300ppm for 1Ω and above; WCB series: ±50ppm from 0.1Ω to 10Ω & ±20ppm above 10Ω;

MCB series: ±200ppm

Power Derating Curve:





Mechanical Specifications							
Type / Code	A Body Length	B Height	C Width	D Lead Diameter	E Height with Standoff	F Lead Length	Unit
CB2	0.700 ± 0.039 17.8 ± 1.0	0.245 ± 0.039 6.2 ± 1.0	0.255 ± 0.039 6.5 ± 1.0	0.032 ± 0.002 0.81 ± 0.05	0.300 ± 0.039 7.6 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB3	0.875 ± 0.039 22.2 ± 1.0	0.312 ± 0.039 7.9 ± 1.0	0.312 ± 0.039 7.9 ± 1.0	0.032 ± 0.002 0.81 ± 0.05	0.375 ± 0.039 9.5 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB5	0.875 ± 0.039 22.2 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.032 ± 0.002 0.81 ± 0.05	0.437 ± 0.039 11.1 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB7	1.400 ± 0.039 35.6 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.500 ± 0.039 12.7 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB10	1.875 ± 0.039 47.6 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.500 ± 0.039 12.7 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB15	1.875 ± 0.039 47.6 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.625 ± 0.039 15.9 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB20	2.500 ± 0.039 63.5 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.625 ± 0.039 15.9 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB22	2.500 ± 0.039 63.5 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.625 ± 0.039 15.9 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB25	2.500 ± 0.039 63.5 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.625 ± 0.039 15.9 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
CB30	2.500 ± 0.039 63.5 ± 1.0	0.625 ± 0.039 15.9 ± 1.0	0.625 ± 0.039 15.9 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	-	1.5 ± 0.25 0.059 ± 0.01	inches mm
WCB2	0.700 ± 0.039 17.8 ± 1.0	0.245 ± 0.039 6.2 ± 1.0	0.255 ± 0.039 6.5 ± 1.0	0.032 ± 0.002 0.81 ± 0.05	0.300 ± 0.039 7.6 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
WCB3 / MCB3	0.875 ± 0.039 22.2 ± 1.0	0.312 ± 0.039 7.9 ± 1.0	0.312 ± 0.039 7.9 ± 1.0	0.032 ± 0.002 0.81 ± 0.05	0.375 ± 0.039 9.5 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
WCB5 / MCB5	0.875 ± 0.039 22.2 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.032 ± 0.002 0.81 ± 0.05	0.437 ± 0.039 11.1 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
WCB7 / MCB7	1.400 ± 0.039 35.6 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.500 ± 0.039 12.7 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
WCB10	1.875 ± 0.039 47.6 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.375 ± 0.039 9.5 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.500 ± 0.039 12.7 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm
WCB15	1.875 ± 0.039 47.6 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.500 ± 0.039 12.7 ± 1.0	0.036 ± 0.002 0.91 ± 0.05	0.625 ± 0.039 15.9 ± 1.0	1.5 ± 0.25 0.059 ± 0.01	inches mm

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 +275°C

How to Order

1	2	3	4	5	6	7	8	9
C	B	2	J	B	1	0	0	R

Product Series		Series	Code	Power	Tolerance		Packaging			Resistance Value			
CB	Standard	CB	2	2W	Code	Tol	Code	Description	Size	Quantity	Four characters with the multiplier used as the decimal holder.		
WCB			3	3W	D	0.5%	B	Bulk	CB 2, 3, 5	750			
MCB			5	5W	F	1%			MCB 3, 5				
CBF			7	7W	J	5%			WCB 2, 3, 5	500			
WCBF	10		10W	K	10%	CB 7, 10, 15			250				
MCBR	15		15W			WCB 7, 10, 15							
NCB	20		20W			MCB 7							
NCBF	22		22W			CB 20, 22, 25, 30			100				
			25	25W									0.1 ohm = R100 33 ohm = 33R0 3.32 Kohm = 3K32
			30	30W									
			WCB	2	2W								
		3		3W									
		5		5W									
		7		7W									
		10		10W									
		MCB	15	15W									
			3	3W									
			5	5W									
			7	7W									

Legacy Part Number (before January 3, 2011):

SEI Type	Code	Nominal Resistance	Tolerance	Packaging
CB	2	100	5%	B
Code	Description	Code	Tolerance	SEI Types
CB	Standard	2	3	CB 2, CB 3, CB 5, MCB 3, MCB 5
WCB		5	7	WCB 2, WCB 3, WCB 5
MCB		10	15	CB 7, CB 10, CB 15, WCB 7, WCB 10, WCB 15, MCB 7
CBF	With standoff	20	22	CB 20, CB 22, CB 25, CB 30
WCBF		25	30	
MCBF				
NCB	Non inductive			
NCBF	Non inductive with standoff			

Pkg Qty	Description	Code
750	bulk	B
500		
250		
100		