

CB Series

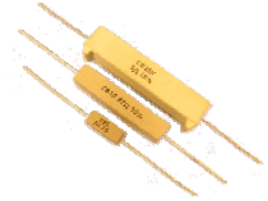
Ceramic Housed with Axial Leads Wirewound Resistor

Stackpole Electronics, Inc.

Resistive Product Solutions

Features:

- Fireproof power wirewound
- High thermal conductivity
- Different element(resistor) available:
- precision / ceramic & metal oxide
- Non-inductive styles available
- Body standoffs available; add "F" after CB
- RoHS compliant / lead-free

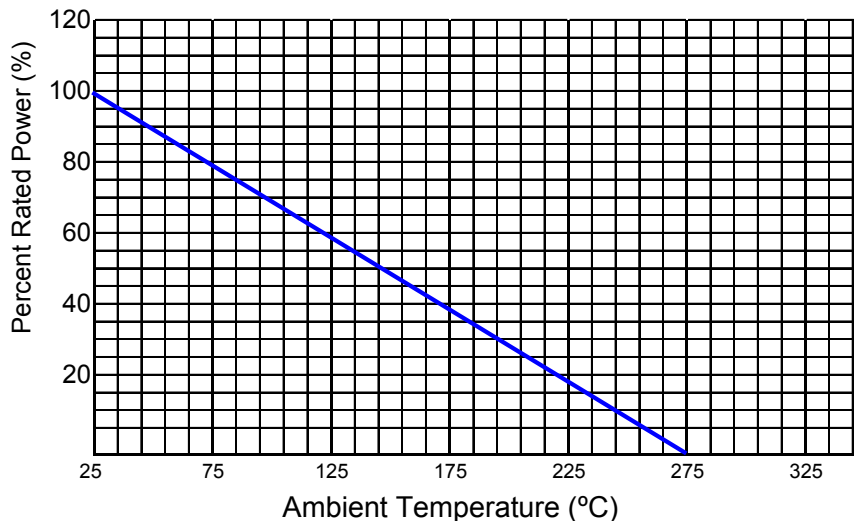


Electrical Specifications					
Type / Code	Power Rating (Watts) @ 70°C	Ohmic Range(Ω) and Tolerance			
		0.5%	1%	5%	10%
CB 2	2W	-	-	0.1 - 300	0.1 - 300
CB 3	3W	-	-	0.1 - 680	0.1 - 680
CB 5	5W	-	-	0.1 - 680	0.1 - 680
CB 7	7W	-	-	0.1 - 1.5K	0.1 - 1.5K
CB 10	10W	-	-	0.1 - 2K	0.1 - 2K
CB 15	15W	-	-	0.15 - 2K	0.15 - 2K
CB 20	20W	-	-	0.2 - 2K	0.2 - 2K
CB 22	22W	-	-	1 - 250	1 - 250
CB 25	25W	-	-	0.2 - 2K	0.2 - 2K
CB 30	30W	-	-	1 - 250	1 - 250
WCB 2	2W	1 - 5K	0.1 - 5K	0.1 - 5K	-
WCB 3	3W	1 - 10K	0.1 - 10K	0.1 - 10K	-
WCB 5	5W	1 - 10K	0.1 - 10K	0.1 - 10K	-
WCB 7	7W	1 - 15K	0.1 - 15K	0.1 - 15K	-
WCB 10	10W	1 - 20K	0.1 - 20K	0.1 - 20K	-
WCB 15	15W	1 - 20K	0.1 - 20K	0.1 - 20K	-
MCB 3	3W	-	-	1 - 500K	-
MCB 5	5W	-	-	1 - 500K	-
MCB 7	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:

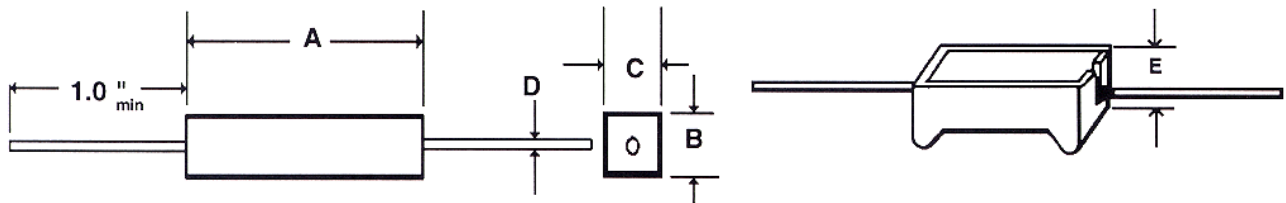


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Mechanical Specifications						
Type / Code	A	B	C	D	E	Units
CB 2	0.709 ± 0.039	0.276 ± 0.039	0.276 ± 0.039	0.025 ± 0.002	0.3 ± 0.039	inches
	18.0 ± 1.0	7.0 ± 1.0	7.0 ± 1.0	0.65 ± 0.05	7.6 ± 1.0	mm
CB 3	0.866 ± 0.039	0.312 ± 0.039	0.312 ± 0.039	0.032 ± 0.002	0.375 ± 0.039	inches
	22.0 ± 1.0	8.0 ± 1.0	8.0 ± 1.0	0.81 ± 0.05	9.5 ± 1.0	mm
CB 5	0.866 ± 0.039	0.394 ± 0.039	0.394 ± 0.039	0.032 ± 0.002	0.437 ± 0.039	inches
	22.0 ± 1.0	10.0 ± 1.0	10.0 ± 1.0	0.81 ± 0.05	11.1 ± 1.0	mm
CB 7	1.378 ± 0.039	0.394 ± 0.039	0.394 ± 0.039	0.032 ± 0.002	0.5 ± 0.039	inches
	35.0 ± 1.0	10.0 ± 1.0	10.0 ± 1.0	0.81 ± 0.05	12.7 ± 1.0	mm
CB 10	1.89 ± 0.039	0.394 ± 0.039	0.394 ± 0.039	0.032 ± 0.002	0.5 ± 0.039	inches
	48.0 ± 1.0	10.0 ± 1.0	10.0 ± 1.0	0.81 ± 0.05	12.7 ± 1.0	mm
CB 15	1.89 ± 0.039	0.492 ± 0.039	0.492 ± 0.039	0.032 ± 0.002	0.625 ± 0.039	inches
	48.0 ± 1.0	12.5 ± 1.0	12.5 ± 1.0	0.81 ± 0.05	15.9 ± 1.0	mm
CB 20	2.362 ± 0.039	0.571 ± 0.039	0.531 ± 0.039	0.032 ± 0.002	0.625 ± 0.039	inches
	60.0 ± 1.0	14.5 ± 1.0	13.5 ± 1.0	0.81 ± 0.05	15.9 ± 1.0	mm
CB 22	2.5 ± 0.039	0.5 ± 0.039	0.5 ± 0.039	0.036 ± 0.002	0.625 ± 0.039	inches
	63.5 ± 1.0	12.7 ± 1.0	12.7 ± 1.0	0.91 ± 0.05	15.9 ± 1.0	mm
CB 25	2.362 ± 0.039	0.571 ± 0.039	0.531 ± 0.039	0.032 ± 0.002	0.625 ± 0.039	inches
	60 ± 1	14.5 ± 1.0	13.5 ± 1.0	0.81 ± 0.05	15.9 ± 1.0	mm
CB 30	2.5 ± 0.039	0.625 ± 0.039	0.625 ± 0.039	0.036 ± 0.002	-	inches
	63.5 ± 1.0	15.9 ± 1.0	15.9 ± 1.0	0.91 ± 0.05		mm
WCB 2	0.7 ± 0.039	0.245 ± 0.039	0.255 ± 0.039	0.032 ± 0.002	0.3 ± 0.039	inches
	17.8 ± 1.0	6.2 ± 1.0	6.5 ± 1.0	0.81 ± 0.05	7.6 ± 1.0	mm
WCB 3 / MCB 3	0.875 ± 0.039	0.312 ± 0.039	0.312 ± 0.039	0.032 ± 0.002	0.375 ± 0.039	inches
	22.2 ± 1.0	7.9 ± 1.0	7.9 ± 1.0	0.81 ± 0.05	9.5 ± 1.0	mm
WCB 5 / MCB 5	0.875 ± 0.039	0.375 ± 0.039	0.375 ± 0.039	0.032 ± 0.002	0.437 ± 0.039	inches
	22.2 ± 1.0	9.5 ± 1.0	9.5 ± 1.0	0.81 ± 0.05	11.1 ± 1.0	mm
WCB 7 / MCB 7	1.4 ± 0.039	0.375 ± 0.039	0.375 ± 0.039	0.036 ± 0.002	0.5 ± 0.039	inches
	35.6 ± 1.0	9.5 ± 1.0	9.5 ± 1.0	0.91 ± 0.05	12.7 ± 1.0	mm
WCB 10	1.875 ± 0.039	0.375 ± 0.039	0.375 ± 0.039	0.036 ± 0.002	0.5 ± 0.039	inches
	47.6 ± 1.0	9.5 ± 1.0	9.5 ± 1.0	0.91 ± 0.05	12.7 ± 1.0	mm
WCB 15	1.875 ± 0.039	0.5 ± 0.039	0.5 ± 0.039	0.036 ± 0.002	0.625 ± 0.039	inches
	47.6 ± 1.0	12.7 ± 1.0	12.7 ± 1.0	0.91 ± 0.05	15.9 ± 1.0	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

SEI Type		Code	Nominal Resistance	Tolerance	Packaging			
CB		2	100	5%	B			
Code	Description	Code		Tolerance	SEI Types	Pkg Qty	Description	Code
CB	Standard	2	3	0.5%	CB 2, CB 3, CB 5, MCB 3, MCB 5	750	bulk	B
WCB		5	7	1%	WCB 2, WCB 3, WCB 5	500		
MCB		10	15	5%	CB 7, CB 10, CB 15, WCB 7, WCB 10, WCB 15, MCB 7	250		
CBF	20	22	10%	CB 20, CB 22, CB 25, CB 30	100			
WCBF	With standoff	25	30					
MCBF								
NCB	Non inductive							
NCBF	Non inductive with standoff							

New part number format starting January 3rd, 2011:

How to Order

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	D	0.5%	B	bulk	Size		Quantity	Four characters with the multiplier used as the decimal holder. 0.1 ohm = R100 33 ohm = 33R0 3.32 Kohm = 3K32		
	WCB			3	3W	F	1%			CB 2, 3, 5	750				
	MCB			5	5W	J	5%			MCB 3, 5		500			
	CBF	With standoff		7	7W	K	10%			WCB 2, 3, 5	250				
	WCBF			10	10W			CB 7, 10, 15							
	MCBF			15	15W			WCB 7, 10, 15							
	NCB	Non-inductive		20	20W			MCB 7	100						
	NCBF	Non-inductive with standoff		22	22W			CB 20, 22, 25, 30							
				25	25W										
				30	30W										
			WCB	2	2W										
				3	3W										
				5	5W										
			MCB	7	7W										
				10	10W										
				15	15W										