



## RADIAL TERMINALS TYPE

Standard Type [CBZ Series],  
Non-Inductive Type [CBZN Series]

### FEATURES

Space Saving Stand-Off Type

Resistance Tolerance:  $\pm 5\%$

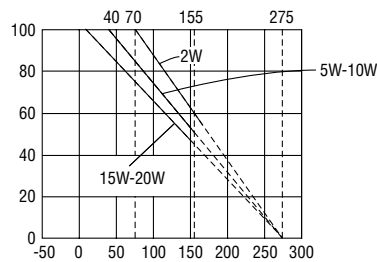
Completely Unflammable

### INTRODUCTION

- The materials used and the construction techniques ensure excellent flame resistance, arc resistance and moisture resistances as well as self-extinguishing capabilities. They will withstand the most rigorous loading test
- As resistors in radio and television receivers, the hazardous conditions of smoking and redheat can be completely prevented by the proper choice of power resistors

### DERATING CURVE

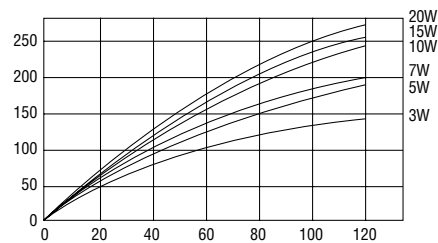
Rated Load (%)



Ambient Temperature (°C)

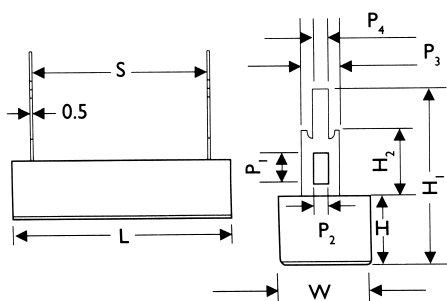
### HOT-SPOT TEMPERATURE

Temperature Rise (°C)



Rated Load (%)

### DIMENSIONS



Unit : mm

STYLE	L	H	W	S	H1	H2	P1	P2	P3	P4
CBZ30	24 $\pm$ 1.5	9.0 $\pm$ 1	9.0 $\pm$ 1	12.5 $\pm$ 1	24.0 $\pm$ 1	9.5 $\pm$ 1.0	4.0 $\pm$ 0.2	2.0 $\pm$ 0.2	5.0 $\pm$ 0.2	1.4 $\pm$ 0.1
CBZ50	27 $\pm$ 1.5	9.5 $\pm$ 1	9.5 $\pm$ 1	15.0 $\pm$ 1	24.0 $\pm$ 1	9.5 $\pm$ 1.0	4.0 $\pm$ 0.2	2.0 $\pm$ 0.2	5.0 $\pm$ 0.2	1.4 $\pm$ 0.1
CBZ70	35.0 $\pm$ 1.5	9.5 $\pm$ 1	9.5 $\pm$ 1	22.5 $\pm$ 1	24.0 $\pm$ 1	9.5 $\pm$ 1.0	4.0 $\pm$ 0.2	2.0 $\pm$ 0.2	5.0 $\pm$ 0.2	1.4 $\pm$ 0.1
CBZ100	48.0 $\pm$ 1.5	9.5 $\pm$ 1	9.5 $\pm$ 1	32.5 $\pm$ 1	24.0 $\pm$ 1	9.5 $\pm$ 1.0	4.0 $\pm$ 0.2	2.0 $\pm$ 0.2	5.0 $\pm$ 0.2	1.4 $\pm$ 0.1
CBZ150	48.0 $\pm$ 1.5	12.5 $\pm$ 1	12.5 $\pm$ 1	35.0 $\pm$ 1	34.5 $\pm$ 1	15.0 $\pm$ 1.5	7.0 $\pm$ 0.2	6.0 $\pm$ 0.2	10.0 $\pm$ 0.2	2.7 $\pm$ 0.1
CBZ200	63.5 $\pm$ 2.0	12.5 $\pm$ 1	12.5 $\pm$ 1	50.0 $\pm$ 1	34.5 $\pm$ 1	15.0 $\pm$ 0.15	7.0 $\pm$ 0.2	6.0 $\pm$ 0.2	10.0 $\pm$ 0.2	2.7 $\pm$ 0.1

## CBZ/CBZN Series

### ELECTRICAL CHARACTERISTICS

STYLE	CBZ30	CBZ50	CBZ70	CBZ100	CBZ150	CBZ200
Power Rating	3W	5W	7W	10W	15W	20W
Operating Temp. Range	-55°C to +155°C					
Maximum Working Voltage	250V	350V	500V	500V	500V	500V
Maximum Overload Voltage	500V	700V	1000V	1000V	1000V	1000V
Dielectric Withstanding Voltage	500V	700V	1000V	1000V	1000V	1000V
Value Range ±5% (Ceramic Core)	0.22Ω~120Ω	0.47Ω~180Ω	0.68Ω~220Ω	1Ω~270Ω		
Value Range ±5% (Metal Oxide Film)	130Ω~22KΩ	200Ω~33KΩ	240Ω~10KΩ	300Ω~10KΩ		
Temperature Coefficient	±300ppm/°C					

\* 1. Standard resistance is as the above list, below or over this resistance on request.

\* 2. Non-Inductive type up to 50Ω only.

### ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRAISE
Short Time Overload	JIS-C-5202 5.5	2.5 Times RCWV for 5 Seconds ±(2%+0.05Ω)
Dielectric Withstanding Voltage	JIS-C-5202 5.7	in V-Block for 60 Seconds by Type
Temperature Coefficient of Resistance	JIS-C-5202 5.2	-55°C to +155°C ±300ppm/°C
Insulation Resistance	JIS-C-5202 5.6	in V-Block >100MΩ
Solderability	JIS-C-5202 6.5	235°C for 5±0.5 Seconds 95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9	Trichroethane for 1 Min. with Ultrasonic No Deterioration of Coatings and Markings
Terminal Strength	Direct load for 10 Sec. in The Direction of The Terminal Leads ≥2.5kg (24.5N)	
Pulse Overload	JIS-C-5202 5.8	4 Times RCWV 10000 Cycles (1 Sec. on , 25 Sec. off) ±(2%+0.05Ω)
Load Life in Humidity	JIS-C-5202 7.9	40±2°C, 90~95% RH at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off) ±(5%+0.05Ω)
Load Life	JIS-C-5202 7.10	70°C at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off) ±(5%+0.05Ω)
Temperature Cycling	JIS-C-5202 7.4	-65°C·Room Temp.·150°C·Room Temp. for 5 Cycles ±(2%+0.05Ω)
Resistance to Soldering Heat	JIS-C-5202 6.4	350°C±10°C for 3±0.5 Seconds ±(1%+0.05Ω)

\* Rated Continuous Working Voltage (RCWV)=√Power Rating x Resistance Value