

CERAMIC RESISTORS



20 Watt - 5%

10 Watt - 5%

5 Watt - 5%

The ceramic resistors are an affordable resistor for budget to medium quality audio application and a proven stable of the OEM speaker manufacturing industry

HIGHLIGHTS

Available in 5, 10 and 20 watt versions

Affordable and reliable

Easy to apply on PCB crossovers

High temperature tolerance and resistant to humidity and shock

TECHNICAL INFORMATION

- Small in dimensions, excellent in stability with high tolerance for temperature, humidity and shock
- Completely insulated making them highly suitable for PCB crossover application
- In the high values the winding cores are replaced by high power handling film
- Instant overload capacity, low noise figure and low annual shift in resistance value
- Max overload voltage is 2 times of max. working voltage
- Power handling film means that decreasing the resistance values compared to models with wound resistance wire.

TYPE	Dimension(mm)				Resistance Range(Ω)		Max Working Voltage
	W ±1	H ±1	L ±1.5	d ±0.1	Wirewound	Power Film	
2W	7	7	18	0.65	0.1-100	101-10K	150V
3W	8	8	22	0.8	0.1-150	151-33K	350V
5W	10	9	22	0.8	0.1-150	151-50K	350V
7W	10	9	35	0.8	0.1-430	431-50K	500V
10W	10	9	48	0.8	0.1-470	471-50K	750V
15W	12.5	11.5	48	0.8	0.5-600	601-150K	1000V
20W-25W	14	13.5	60	0.8	0.5-1K	1.1K-150K	1000V

Rated Continuous Working Voltage(RCWW) shall be determined from $RCWW = \sqrt{\text{Rated Power} \times \text{Resistance Value}}$ or Max. Working Voltage listed above, whichever less.

- Operating temperature range: -55°C~155°C

- **Resistance temperature coefficient:**

It shall be within $\pm 300\text{ppm}/^\circ\text{C}$ and if the ohmic value is under 1Ω the T.C. shall be within $\pm 600\text{ppm}/^\circ\text{C}$.

$$\text{T.C. (ppm}/^\circ\text{C}) = [(R2 - R1) \div R1] \times [1 \div (T2 - T1)] \times 10^6$$

where

R1: resistance value at reference temperature

R2: resistance value at test temp.

T1: reference temp. (usu. 25°C)

T2: test temp. (about 75°C)

- **Temperature cycle:**

Following temp. cycles are to be made 5 times and then put at room temp. for one hour, the resistance value change rate between pre-and-post test shall be within $\pm 1\%$.

Steps	Temperature($^\circ\text{C}$)	Time (minutes)
1 st step	-55 ± 3	30
2 nd step	Room temp.	3
3 rd step	155 ± 3	30
4 th step	Room temp.	3

