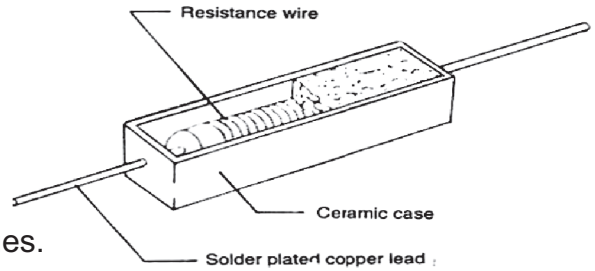
MFR — Electronic Components Pvt. Ltd.

CERAMIC ENCASED (WIRE WOUND RESISTORS)

Series: **MCA / MCR**

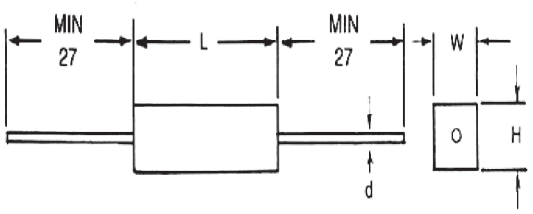
Construction:



Features:

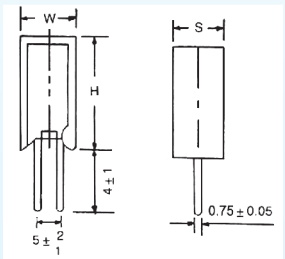
- ► Fully welded construction.
- ► Flameproof inorganic construction.
- ► Enhanced heat dissipation.
- ► Operating temperature -55°C to +275°C.
- ► MO film element utilized for higher resistance values.
- ► Any special design on request.

Ceramic Encased Boat Type (MCA)



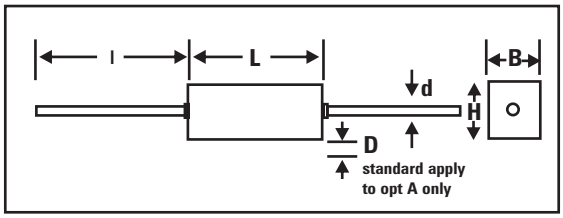
MCA	DIMENSION (mm)				RESISTANCE RANGE (Ω)		MAX WORKING VOLTAGE
	L ± 1.5	W ± 1.0	H ± 1.0	d ± 0.05	WIRE WOUND	MO	
2W	18.0	7.0	7.0	0.65	0.1Ω ~ 50Ω	51Ω ~ 20KΩ	150V
3W	22.0	8.0	8.0	0.75	0.1Ω ~ 50Ω	51Ω ~ 33KΩ	350V
5W	22.0	9.5	9.0	0.75	0.1Ω ~ 100Ω	101Ω ~ 50KΩ	350V
7W	35.0	9.5	9.0	0.75	0.1Ω ~ 500Ω	501Ω ~ 50KΩ	500V
10W	48.0	9.5	9.0	0.75	0.1Ω ~ 500Ω	501Ω ~ 50KΩ	750V
15W	48.0	12.5	12.0	0.75	0.5Ω ~1K	1KΩ ~ 150KΩ	1000V
20W	60.0	14.0	13.5	0.75	0.5Ω ~1K	1KΩ ~ 150KΩ	1000V

Ceramic Encased Vertical Boat Type (MCR)



MCR	DIMENSION(mm)			RESISTANCE RANGE (Ω)	
	H ± 1.5	W ± 1	S ± 1	WIREWOUND	MO
2W	20	11	7.5	0.1Ω ~ 50Ω	51Ω ~ 20KΩ
3W	25	12	9	0.1Ω ~ 50Ω	51Ω ~ 33KΩ
5W	25	13	9	0.1Ω ~ 100Ω	101Ω ~ 50KΩ
7W	39	13	9	0.1Ω ~ 500Ω	501Ω ~ 50KΩ
10W	51	13	9	0.1Ω ~ 500Ω	501Ω ~ 50KΩ
10WS	35	16	12	0.5Ω ~1K	1KΩ ~ 150KΩ

CERAMIC ENCASED (TUBE TYPE) MCAT

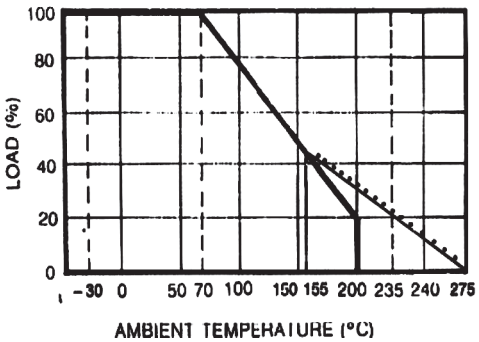


Wattage	MCA T Series	Resistance Ranges		Physical Dimension in mm				
		Min	Max	B ± 1.0	H ± 1.0	L ± 1.5	d ± 0.1	l(min)
1W	MCA T1	0R01	1K5	6.0	6.0	15.0	0.8	28.0
2W	MCA T2	0R01	2K	6.5	6.5	15.0	0.8	28.0
3W	MCA T3	0R01		7.0	7.0	15.0	0.8	28.0
4W	MCA T4	0R01	4K7	6.5	6.5	20.0	0.8	28.0
5W	MCA T5	0R01	6K8	6.5	6.5	25.0	0.8	28.0
6W	MCA T5 A	0R01		9.0	9.0	20.0	0.8	28.0
	MCA T6	0R01	8K2	9.0	9.0	25.0	0.8	28.0

Performance:

Test Items	Condition	Spec.
Resistance Temp. Coeff.	- 55° ~ +155°C	± 300 ppm/°C
Short Time Overload	5 times rated wattage for 5 sec	Δ R < ± 2%
Rated Load	Rated voltage 30 min	Δ R < ± 1%
Insulation Resistance	500v megger	500MΩ
Temp. Cycle	- 30°C ~ + 85°C for 5 cycles	Δ R < ± 1%
Load Life	70°C On-Off cycle 1000 hrs	Δ R < ± 5%
Damp Heat	40°C 95%RH On-Off cycle 1000 hrs	Δ R < ± 3%

DERATING CURVE



TEMPERATURE RISE AT 25°C