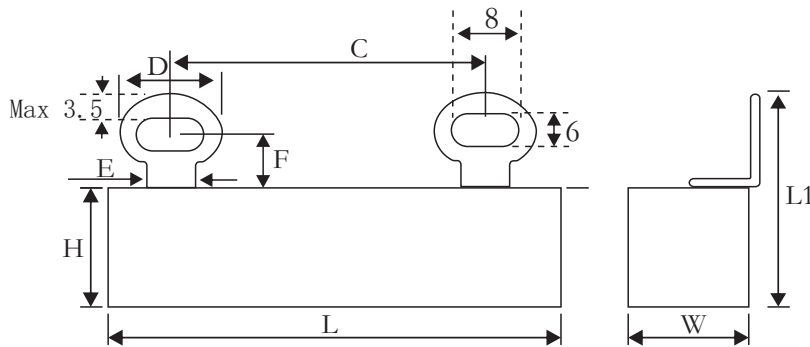




● Features

- I Good heat-durability, low temperature coefficient, low noise, high load power, high insulating capacity.
- II Operating ambient temperature: -55°C to +275°C

● Dimensions



Type	Power (W)	Dimensions (mm)							
		L ± 1	W ± 1	H ± 1	C ± 1	D ± 0.5	L1 ± 1.0	E	F
MS 2	7	48	12.5	12.5	31.7	12.5	28	5	8
MS 2	10	48	12.5	12.5	31.7	12.5	28	5	8
MS 2	15	48	12.5	12.5	31.7	12.5	28	5	8
MS 2	20	63	12.5	12.5	35.0	12.5	28	5	8

● Ordering Information

Example:

MS 2	10	J	10R00
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1) Type: MS 2 SERIES

(2) Power Rating: 7=5W, 10=10W, 15=15W, 20=20W

(3) Tolerance: F=±1%, G=±2%, J=±5%, K=±10%

(4) Resistance Value: 0R100=0.1Ω, 1R000=1Ω, 4R700=4.7Ω, 10K00=10KΩ

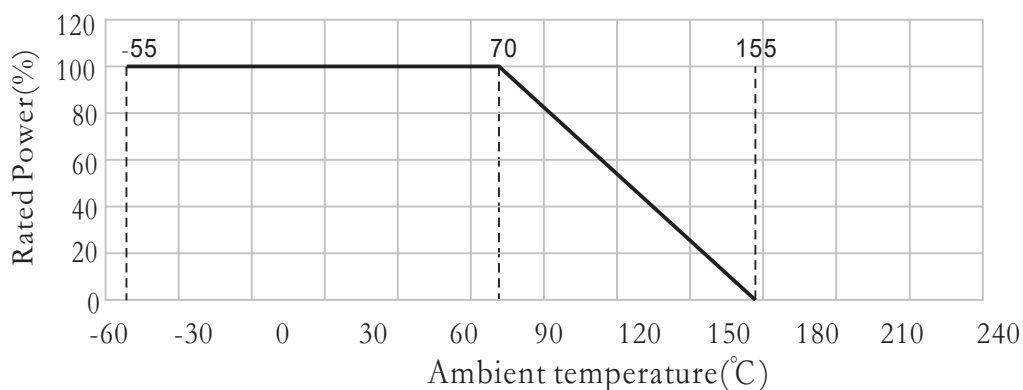
● Reference Standards

JISC 5201-1

● Power and Resistance etc

Type	Power (W)	Resistance Range(Ω)	Tolerance Range	Max. working voltage	Insulation voltage	Max. overload voltage
MS 2	7	1R~100KR	J \pm 5% K \pm 10%	\sqrt{PR}	700V	1000V
MS 2	10	1R~100KR		\sqrt{PR}	1000V	1500V
MS 2	15	1R~100KR		\sqrt{PR}	1000V	1500V
MS 2	20	1R~100KR		\sqrt{PR}	1000V	1500V

● Derating Curve



● Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	$\pm 300\text{ppm}/^\circ\text{C}$	Test resistance value at normal temperature and normal temperature added 100°C, calculate 70°C resistance value change rate.
Short time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	1~4W: According 5 times rated power to account the voltage, 5~10W: According 10 times rated power to account the voltage or max. overload voltage (get the lower) for 5 seconds.
Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	Immerge into the $350 \pm 10^\circ\text{C}$ tin stove for 2~3 seconds
Solderability	Tth soldering area is over 95%	Immerge into the $245 \pm 3^\circ\text{C}$ tin stove for 2~3 seconds
Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	At -55°C for 30min, then at $+25^\circ\text{C}$ for 10~15min, then at $+275^\circ\text{C}$ for 30min, then at $+25^\circ\text{C}$ for 10~5, min, total 5cycles.
Load life in humidity	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	Overload rated voltage or Max. working voltage (get the lower) for 1000hours (1.5hours on and half-hour off) at the $40 \pm 2^\circ\text{C}$ and 90~95% relative humidity.
Nonflammability	No visible flame	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.