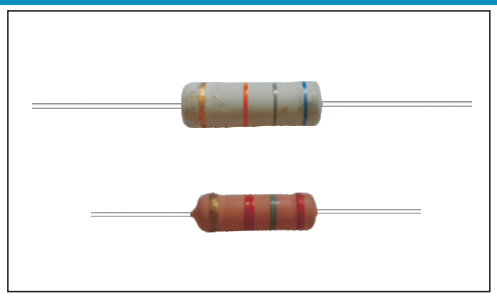
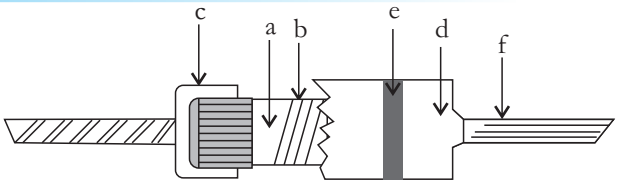
MOR Metal Oxide Film Fixed Resistors



Features

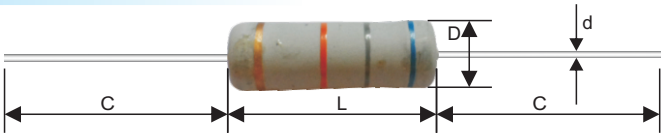
Ⅰ Good performance in moisture resistance ,anti-oxidization, good thermal stability, nonflammability,overload stability.
Ⅱ Operating ambient temperature:-55℃～+155℃.
Ⅲ The surface is nonflammable.
Ⅳ Resistance tolerance:±2%、 ±5%.

Construction



a	High AL2O3
b	High Stability Electric Conduction Film
c	Iron Cap
d	Silicon Resin Coating
e	Color Ring
f	Tinned copper lead wire

Dimensions



Type	Power	Dimensions(mm)			
		L±1	D±0.5	C±3	d±0.05
MOR016	1/6W	3.2	1.7	28	0.41
MOR14S	1/4WS	3.2	1.7	28	0.41
MOR14	1/4W	6.0	2.3	28	0.52
MOR12S	1/2WS	6.0	2.3	28	0.52
MOR12	1/2W	9.0	3.2	28	0.52
MOR01S	1WS	9.0	3.2	28	0.58
MOR01B	1W	11.0	4.5	33	0.75
MOR02S	2WS	11.0	4.5	33	0.75
MOR02B	2W	15.0	5.0	33	0.75
MOR03S	3WS	15.0	5.0	33	0.75
MOR03B	3W	17.0	6.0	38	0.75
MOR05S	5WS	17.0	6.0	38	0.75
MOR05B	5W	25.0	8.0	38	0.75

Ordering Information

Example:

MOR	01B	J	100K0
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1)Type: MOR SERIES
(2)Power Rating: 01B=1W,02S=2WS,02B=2W...
(3)Tolerance:F=±1%、G=±2%、J=±5%
(4)Resistance Value:0R100=0.1Ω,0R220=0.22Ω,10R00=10Ω,10K00=10KΩ,1M000=1MΩ

Reference Standards

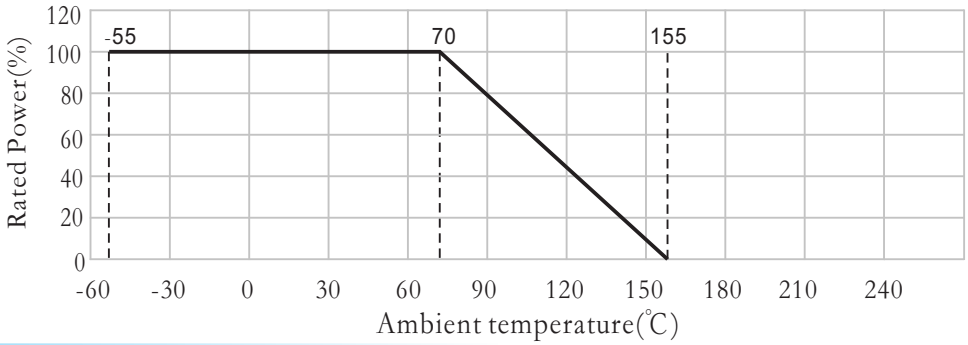
JISC 5201-1

Applications And Ratings

Type	Power	Range Resistance (Ω)	Max. working voltage	Max. overload voltage	Max. Pulse voltage	Max. Insulation voltage
MOR016	1/6W	0R~1M	150V	300V	300V	200V
MOR14S	1/4WS	0R~1M	150V	300V	300V	200V
MOR14	1/4W	0R~1M	200V	400V	500V	250V
MOR12S	1/2WS	0R~1M	200V	400V	500V	250V
MOR12	1/2W	0R1~1M	250V	400V	500V	250V
MOR01S	1WS	0R1~1M	350V	600V	750V	350V
MOR01B	1W	0R1~1M	350V	600V	750V	350V
MOR02S	2WS	0R1~1M	350V	600V	750V	350V
MOR02B	2W	0R1~1M	350V	600V	750V	350V
MOR03S	3WS	0R1~1M	350V	600V	750V	350V
MOR03B	3W	0R1~1M	500V	800V	1000V	500V
MOR05S	5WS	0R1~1M	500V	800V	1000V	500V
MOR05B	5W	0R1~1M	500V	800V	1000V	500V

Note:
a、"S"means small size.
b、Rated voltage=$\sqrt{\text{Power} \times \text{Resistance Value}}$
c、If the rated voltage calculated is higher than max.working voltage, follow the lower value.

Derating Curve



Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	±350ppm/℃	Test resistance value at normal temperature and normal temperature added 100℃, calculate ℃ resistance value change rate.
Short time overload	△R≤±(1%R₀+0.05Ω)	2.5X rated power or Max. overload voltage(get the lower) for 5 seconds.
Pulse overload	△R≤±(2%R₀+0.05Ω)	At 4Xrated power or Max. pulse overload voltage(get the lower)cycle 10000±200 times(1second on 25 seconds off)
Resistance to soldering heat	△R≤±(1%R₀+0.05Ω)	Immerge into the 350±10℃ tin stove for 2~3 seconds
Solderability	Tth soldering area is over 98%	Immerge into the 245±3℃ tin stove for 2~3 seconds
Temperature cycle	△R≤±(1%R₀+0.05Ω)	At-55℃ for 30min, then at+25℃ for 10~15min,then at +125℃ for 30min, then at +25℃ for 10~5, min,total 5cycles.
Load life in humidity	△R≤±(5%R₀+0.05Ω)	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the 40±2℃ and 90~95% relative humidity.
Load life in heat	△R≤±(5%R₀+0.05Ω)	Overload rated voltage or Max.working voltage(get the lower)for 1000hours (1.5hours on and half-hour off) at the 70±2℃.
Nonflammability	No visible flame	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.