

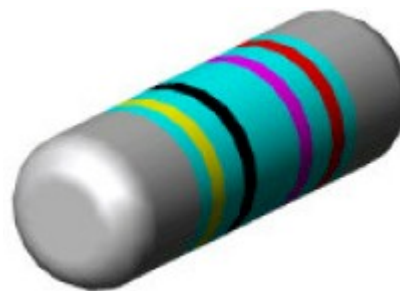
## MFM METAL FILM MELF PRECISION RESISTOR

### Features

- MELF configuration
- Excellent overall stability
- Tight tolerance down to  $\pm 0.1\%$
- Extremely low TCR down to  $\pm 10\text{ppm/C}$

### Applications

- Automotive
- Telecommunication
- Medical Equipment



### GENERAL SPECIFICATIONS (HIGH POWER)

Model	Power Rating at 70	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Resistance Range[Ω]				TCR (ppm/C)
					$\pm 0.1\%$	$\pm 0.25\%$	$\pm 0.5\%$	$\pm 1\%$	
MFM 0204	1/4W	-55 to +155C	200V	400V	100-20K	10-20K			$\pm 10$
					100-100K	10-100K			$\pm 15$
					100-270K	10-330K	4.7-560K	4.7-1M	$\pm 25$
					100-270K	1-330K	1-1M	1-10M	$\pm 50$
MFM 0207	1/2W (1W)	-55 to +155C	300V (350V)	500V (700V)	100-20K	10-20K			$\pm 10$
					100-100K	10-100K			$\pm 15$
					100-400K	10-400K (4.7-1M)	10-560K (4.7-1M)	10-560K (4.7-560K)	$\pm 25$
					100-400K	1-330K (10-1M)	1-1M	1-5.1M (1-2.2M)	$\pm 50$

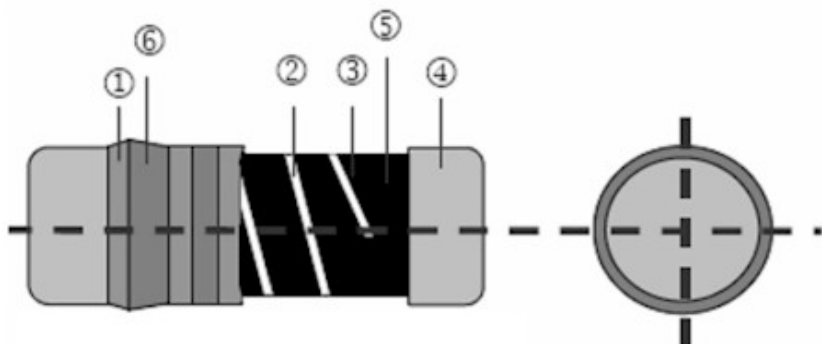
### CHARACTERISTICS

Temp. Coefficient of Resistance	As Spec.	$+20/-15/+20/+100/+20\text{C}$
Short Time Overload	$\Delta R \pm 0.5\%$	RCWV*2.5 or Max. overload voltage for 5 sec.
Endurance	$\Delta R \pm 2\%$	70 $\pm$ 2C, Max. working voltage for 1000hrs with 1.5hrs "ON" and 0.5hrs "OFF"
Damp Heat with Load	$\Delta R \pm 2\%$	40 $\pm$ 2C, 90-95% R.H. Max. working V for 1000hrs with 1.5hrs "ON" and 0.5hrs "OFF"
Dry Heat	$\Delta R \pm 2\%$	At +125C for 1000hrs
Soldering Ability	95% min. coverage	245 $\pm$ 5C for 3sec.
Resistance to Soldering Heat	$\Delta R \pm 0.5\%$	260 $\pm$ 5C for 10sec.

\*Reference Standard: JIS-C 5201-1

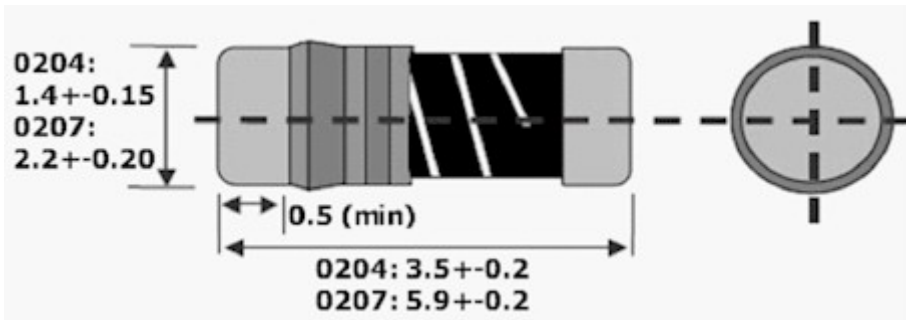
\*Storage Temperature: 25 $\pm$ 3C; Humidity < 80%RH

### STRUCTURE



- 1 Alumina Substrate
- 2 Bottom Electrode(Ag-Pb)
- 3 Top Electrode(Ag)
- 4 Edge Electrode(NiCr)
- 5 Barrier Layer(Ni)
- 6 External Electrode(Sn)

## DIMENSIONS



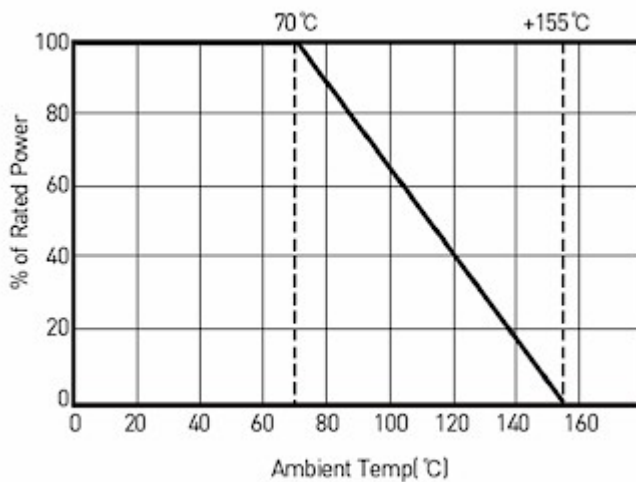
### Packaging

180mm 7"  
 0204 3000pcs.  
 0207 2000pcs

### Weight (/1Kpcs.)

0204 18.7g  
 0207 80.9g

## DERATING CURVE



## ORDERING PROCEDURE EXAMPLE

