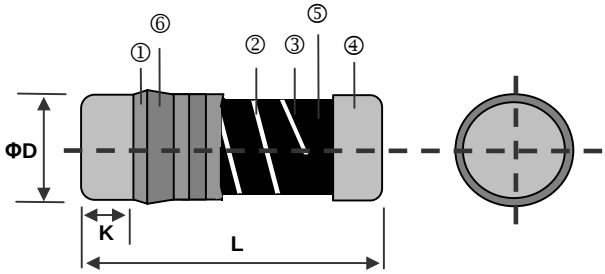
Construction





①	Insulation Coating	④	Electrode Cap
②	Trimming Line	⑤	Resistor Layer
③	Ceramic Rod	⑥	Marking

Features

- Excellent overall stability
- Tight tolerance down to ±0.1%
- Extremely low TCR down to ±10 PPM/°C
- High power rating up to 1 Watt

Dimensions

Unit: mm

Type	L	ΦD	K min.	Weight (g) (1000pcs)	Packaging 180mm (7")
MFMP0204	3.50±0.20	1.40±0.15	0.5	18.7	3,000EA
MFMP0207	5.90±0.20	2.20±0.20	0.5	80.9	2,000EA

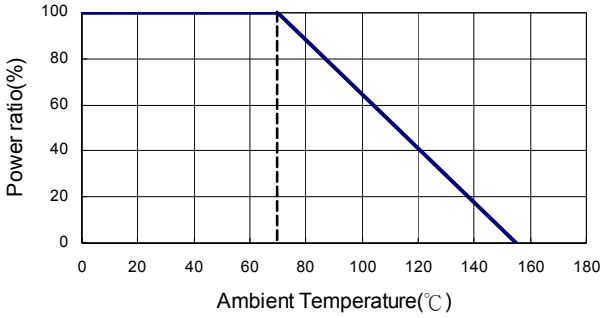
Applications

- Automotive
- Telecommunication
- Medical Equipment

Part Numbering

MFMP	0204	V	1000	D	D
Product Type	Dimensions (L×ΦD)	Power Rating	Resistance	Resistance Tolerance	TCR (PPM/°C)
	0204: 3.5x1.4 0207: 5.9x2.2	T: 1W U: 1/2W V: 1/4W	0100: 10ohm 1000: 100ohm 2201: 2200ohm 1001: 1Kohm 1004: 1Mohm	B: ±0.1% C: ±0.25% D: ±0.5% F: ±1% J: ±5%	B: ±10 N: ±15 C: ±25 D: ±50 E: ±100

Derating Curve



■ Standard Electrical Specifications

Item / Type	Power Rating at 70˚C	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Resistance Range					TCR (PPM/˚C)
					±0.1%	±0.25%	±0.5%	±1%	±5%	
0204	1/4W	-55 ~ +155°C	200V	400V	100Ω-20KΩ	10Ω-20KΩ				±10
					100Ω-100KΩ	10Ω-100KΩ				±15
					100Ω-270KΩ	10Ω-330KΩ	4.7Ω-560KΩ	4.7Ω-1MΩ		±25
					100Ω-270KΩ	1Ω-330KΩ	1Ω-1MΩ	1Ω-10MΩ		±50
					-			5.11MΩ-10MΩ	-	±100
								0.1Ω-0.91Ω		
0207	1/2W	-55 ~ +155°C	300V	500V	100Ω-20KΩ	10Ω-20KΩ				±10
					100Ω-100KΩ	10Ω-100KΩ				±15
					100Ω-400KΩ	10Ω-400KΩ	10Ω-560KΩ	10Ω-560KΩ		±25
					100Ω-400KΩ	1Ω-330KΩ	1Ω-1MΩ	1Ω-5.1MΩ		±50
					-				0.1Ω-0.91Ω	±100

■High Power Rating Electrical Specifications

Item / Type	Power Rating at 70°C	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Resistance Range					TCR (PPM/°C)
					±0.1%	±0.25%	±0.5%	±1%	±5%	
0207	1W	-55 ~ +155°C	350V	700V	100Ω-100KΩ	10Ω-100KΩ				±15
					100Ω-100KΩ	4.7Ω - 1MΩ	4.7Ω - 1MΩ	4.7Ω-560KΩ		±25
					100Ω-100KΩ	10Ω - 1MΩ	1Ω - 1MΩ	1Ω - 2.2MΩ		±50
					-			0.1Ω – 0.91Ω		±100

■Environmental Characteristics

Item	Requirement	Test Method
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	+20/-15/+20/+100/+20°C
Short Time Overload	△R±0.5%	RCWV*2.5 or Max. overload voltage for 5 seconds
Endurance	△R±2%	70±2°C, Max. working voltage for 1000 hrs with 1.5 hrs “ON” and 0.5 hrs “OFF”
Humidity with Load	△R±2%	40±2°C, 90~95% R.H. Max. working voltage for 1000 hrs with 1.5 hrs “ON” and 0.5 hrs “OFF”
Dry Heat	△R±2%	at +155°C for 1000 hrs
Solderability	95%min. coverage	245±5°C for 3 seconds
Resistance to Soldering Heat	△R±0.5%	260±5°C for 10 seconds

■ **Reference Standards: JIS-C 5201-1**

■ **Storage Temperature: 25±3°C; Humidity < 80%RH**