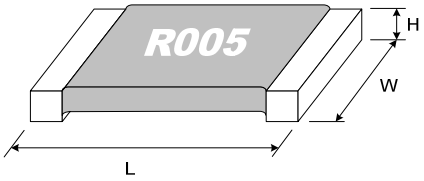
SIRECT ELECTRONIC

PMR SERIES

Power Metal Low OHM Chip Resistor

□ FEATURES

- Rated power from 0.125 up to 2W
- Low resistance value
- Excellent temperature coefficient
- Excellent frequency response
- Lead-Free available



Code Letter	Dimensions (mm)		
	0805	2010	2512
L	2.05 ± 0.25	5.10 ± 0.25	6.35 ± 0.25
W	1.30 ± 0.25	2.55 ± 0.25	3.20 ± 0.25
H	0.35 ± 0.15	0.65 ± 0.15	0.55 ± 0.25

□ APPLICATIONS

- Current detection
- Linear and switching power supplies
- Motherboard
- Digital camera
- Mobile phone

□ TECHNICAL SPECIFICATIONS

Characteristics	Unit	Feature		Measurement Method
Power Ratings	W	Model	Value	JIS Code 3A / JIS Code 3D
		PMR0805	0.125 ~ 0.25	
		PMR2010	0.5 ~ 2.0	
		PMR2512	1.0 ~ 2.0	
Resistance Value	mΩ	Model	Value	Refer to JIS C 5202 5.1
		PMR0805A	10 ~ 200	
		PMR0805B	10 ~ 200	
		PMR2010C	1 ~ 200	
		PMR2010D	1 ~ 500	
		PMR2010E	1 ~ 500	
		PMR2512D	5 ~ 10	
		PMR2512E	10 ~ 100	
Temperature Coefficient of Resistance	ppm/℃	75 ~ 275		Refer to JIS C 5202 5.2
Operation Temperature Range	℃	- 60 ~ + 170		-
Resistance Tolerance	%	± 0.5 ~ 3.0		JIS C 5201 4.2.4
Max. Working Voltage	V	$(P*R)^{1/2}$		-

PMR SERIES

□ STANDARD ELECTRICAL SPECIFICATIONS

Model	Power Rating (W)	Resistance Range (Ω)	RTC (ppm/˚C)	Tolerance (%)	Dimensions (mm)
PMR0805	0.125	0.01-0.20	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=2.05mm±0.25mm W=1.30mm±0.25mm H=0.35mm±0.15mm
PMR0805	0.25	0.01-0.20	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=2.05mm±0.25mm W=1.30mm±0.25mm H=0.35mm±0.15mm
PMR2010	0.5	0.001-0.20	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=5.10mm±0.25mm W=2.55mm±0.25mm H=0.65mm±0.15mm
PMR2010	1.0	0.001-0.5	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=5.10mm±0.25mm W=2.55mm±0.25mm H=0.65mm±0.15mm
PMR2010	2.0	0.001-0.5	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=5.10mm±0.25mm W=2.55mm±0.25mm H=0.65mm±0.15mm
PMR2512	1.0	0.005-0.01	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=6.35mm±0.25mm W=3.20mm±0.25mm H=0.65mm±0.15mm
PMR2512	2.0	0.01-0.1	±75 ±100 ±150 ±275	±0.5 ±1 ±3	L=6.35mm±0.25mm W=3.20mm±0.25mm H=0.65mm±0.15mm

PMR SERIES

□ PART NUMBER INFORMATION

PMR2512 – A - R005 - a - 1 –A

Package Model
PMR8050
PMR2010
PMR2512

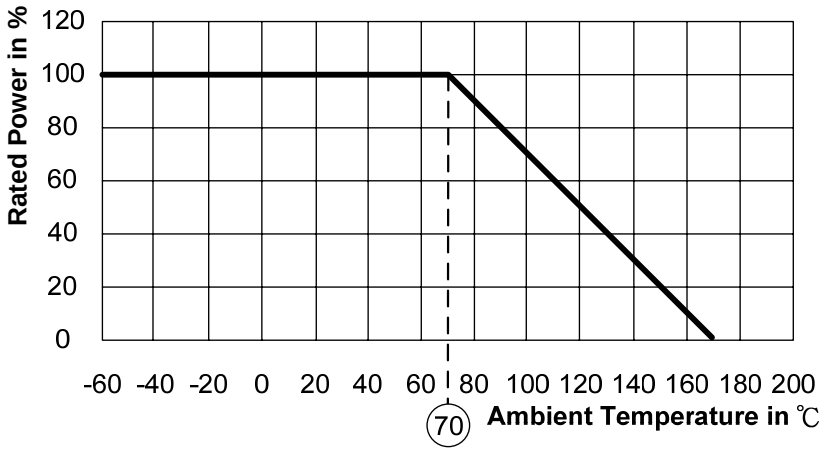
Resistance Value
R005=5mΩ
R050=50mΩ

Tolerance
1=±0.5%
2=±1%
3=±3%

Power Ratings
A=0.125W
B=0.25W
C=0.5W
D=1W
E=2W

Temperature Coefficient
a=±75ppm/˚C
b=±100ppm/˚C
c=±150ppm/˚C
d=±275ppm/˚C

Packaging
A=500 pcs/reel
B=1,000 pcs/reel
C=2,000 pcs/reel
D=4,000 pcs/reel
E=5,000 pcs/reel

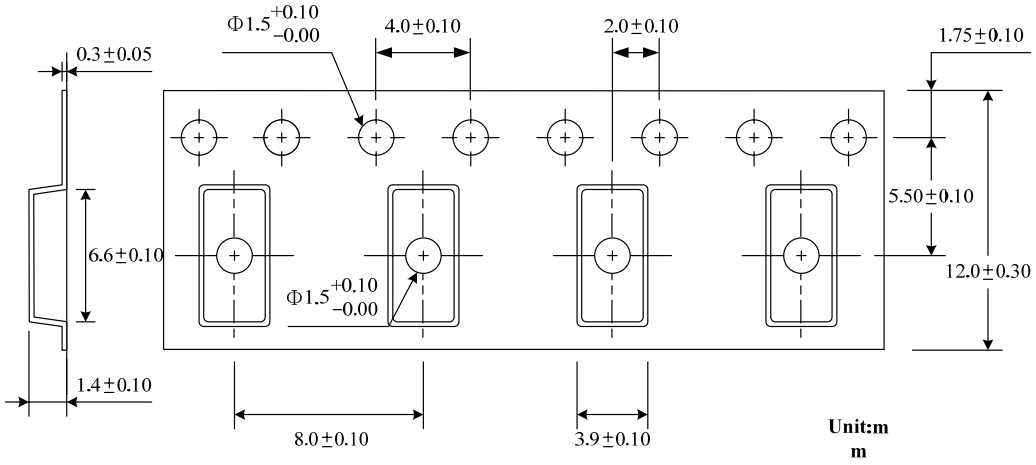


PMR SERIES

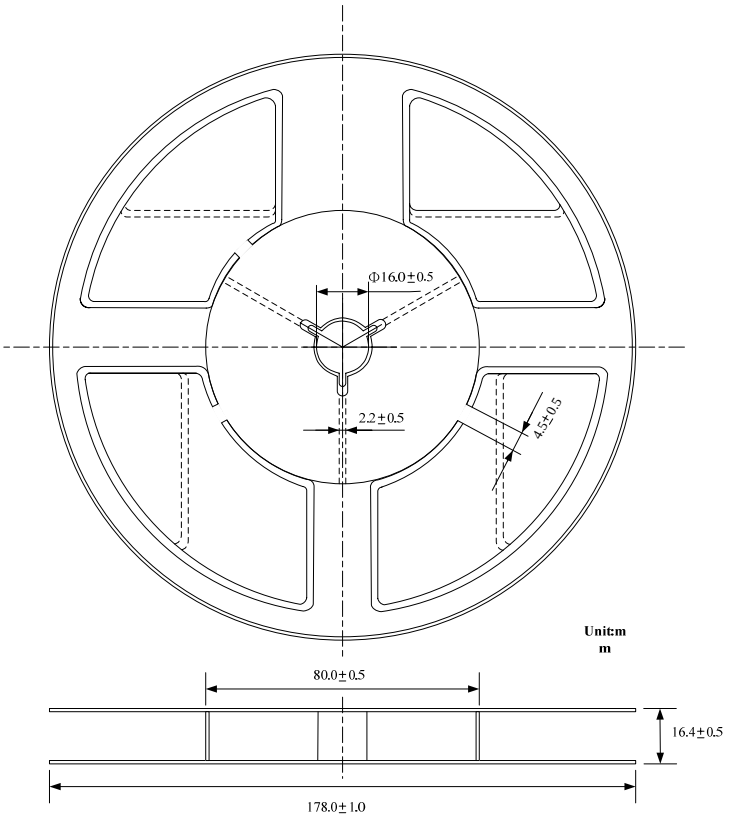
□ RELIABILITU PERFORMANCE

Test Item	Condition of Test	Requirements	Measurement Method
Thermal Shock	-60°C to + 150°C, 1000 cycles, 15 minutes at each extreme	± 0.5%	Refer to JIS C 5202 7.4
Short Time Overload	5 x rated power for 5 seconds	± 0.5%	Refer to JIS C 5202 5.5
Low Temperature Storage	Kept - 60°C for 24 hours	± 0.5%	Refer to JIS C 5202 7.1
High Temperature Exposure	Kept + 170°C for 1000 hours	± 0.5%	Refer to JIS C 5202 7.11
Bias Humidity	+ 85°C, 85% RH, 10% Bias, 1000 hours	± 0.5%	-
Mechanical Shock	100G's for 6 milliseconds, 5 pulses	± 0.5%	Refer to JIS C 5202 6.2
Vibration	Frequency varied 10 to 2000Hz in one minute, 3 directions, 12 hours	± 0.5%	-
Load Life	1000 hours @ rated power, + 70°C, 1.5 hours "ON", 0.5 hours "OFF"	± 1.0%	Refer to JIS C 5202 7.10
Resistance to Solder Heat	+ 260°C Solder,10 - 12 second dwell, 25mm/second emergence	± 0.5%	Refer to JIS C 5202 6.4
Moisture Resistance	MIL-STD-202, Method 106, 0% power, 7a and 7b not required	± 0.5%	-

□ PACKING



Tape Packaging Dimensions



Reel Dimensions