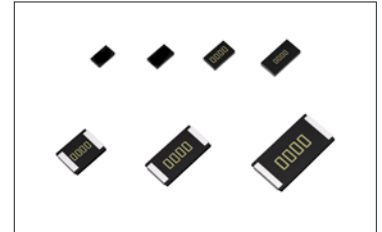


Ultra-low Ohmic Jumper Chip Resistors

PMR Series

●Features

- 1) Metallic resistive element utilized for extremely low conduction resistance. (0.5mΩMax.)
- 2) High current capability.
- 3) Superior strength against overcurrent and pulse loads.
- 4) Completely Pb free product.
- 5) Easy(surface) mounting enables simple replacement of jumper leads.
- 6) ROHM resistors have obtained ISO9001 / ISO / TS16949 certification.



●Products List

Part No.	Size		Rated Current (A)	Resistance	Temperature Range (°C)
	(mm)	(inch)			
PMR01	1005	0402	20.0	0.5mΩ Max.	-55 to +155
PMR03	1608	0603	22.4		
PMR10	2012	0805	31.6		
PMR18	3216	1206	38.7		
PMR25	3225	1210	44.7		
PMR50	5025	2010	50.0		
PMR100	6432	2512	63.2		

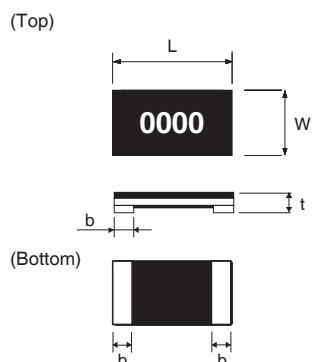
*Design and specifications are subject to change without notice.
Carefully check the specification sheet supplied with the product before using or ordering it.

●Part Number Description

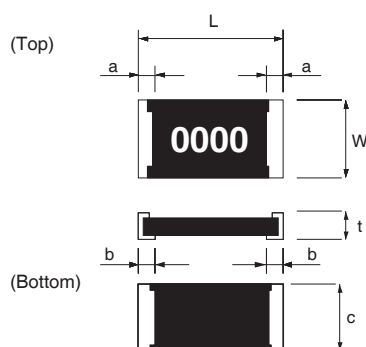
Part No.	Size (mm [inch])	Packaging Specifications code	Resistance Tolerance	Nominal Resistance																																
PMR (Ultra-low Ohmic Jumper Chip Resistors)			J J (Max. 0.5mΩ)	000 Resistance code, 3digits.																																
	01 (1005 [0402]) 03 (1608 [0603]) 10 (2012 [0805]) 18 (3216 [1206]) 25 (3225 [1210]) 50 (5025 [2010]) 100 (6432 [2512])	<table border="1"> <thead> <tr> <th>Part No.</th> <th>Code</th> <th>Packaging specifications</th> <th>Quantity / Reel</th> </tr> </thead> <tbody> <tr> <td>PMR01</td> <td>MZP</td> <td>Paper tape (2mm Pitch)</td> <td>10,000</td> </tr> <tr> <td>PMR03</td> <td>EZP</td> <td>Paper tape (4mm Pitch)</td> <td>5,000</td> </tr> <tr> <td>PMR10</td> <td>EZP</td> <td>Paper tape (4mm Pitch)</td> <td>5,000</td> </tr> <tr> <td>PMR18</td> <td>EZP</td> <td>Paper tape (4mm Pitch)</td> <td>5,000</td> </tr> <tr> <td>PMR25</td> <td>HZP</td> <td>Embossed tape (4mm Pitch)</td> <td>2,000</td> </tr> <tr> <td>PMR50</td> <td>HZP</td> <td>Embossed tape (4mm Pitch)</td> <td>2,000</td> </tr> <tr> <td>PMR100</td> <td>HZP</td> <td>Embossed tape (4mm Pitch)</td> <td>2,000</td> </tr> </tbody> </table>	Part No.	Code	Packaging specifications	Quantity / Reel	PMR01	MZP	Paper tape (2mm Pitch)	10,000	PMR03	EZP	Paper tape (4mm Pitch)	5,000	PMR10	EZP	Paper tape (4mm Pitch)	5,000	PMR18	EZP	Paper tape (4mm Pitch)	5,000	PMR25	HZP	Embossed tape (4mm Pitch)	2,000	PMR50	HZP	Embossed tape (4mm Pitch)	2,000	PMR100	HZP	Embossed tape (4mm Pitch)	2,000		
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PMR100	HZP	Embossed tape (4mm Pitch)	2,000																																	

●Chip Resistor Dimensions and Markings

■ PMR01 / 03 / 10 / 18



■ PMR25 / 50 / 100

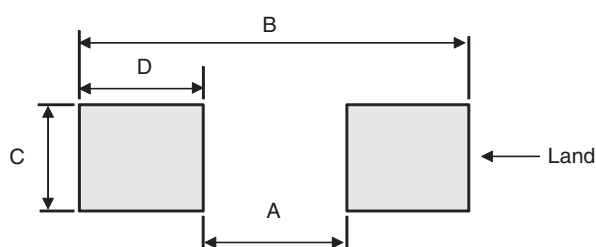


<Marking method>
0000 (4 digits)

(Unit : mm)

Part No.	(mm)	(inch)	L	W	t	a	b	c	Marking existence
PMR01	1005	0402	1.0±0.05	0.5±0.05	0.25±0.1	–	0.3±0.1	–	No
PMR03	1608	0603	1.6±0.15	0.8±0.15	0.25±0.1	–	0.35±0.15	–	No
PMR10	2012	0805	2.0±0.15	1.1 ^{+0.15} _{-0.05}	0.32±0.15	–	0.55±0.25	–	Yes
PMR18	3216	1206	3.2±0.15	1.6±0.15	0.32±0.1	–	0.9±0.25	–	Yes
PMR25	3225	1210	3.2±0.2	2.5±0.15	0.32±0.15	0.5±0.2	0.9±0.2	1.95±0.2	Yes
PMR50	5025	2010	5.0±0.2	2.5±0.2	0.32±0.15	0.5±0.2	1.4±0.2	1.95±0.2	Yes
PMR100	6432	2512	6.4±0.25	3.2±0.25	0.32±0.15	0.5±0.25	1.7±0.25	2.65±0.25	Yes

●Land pattern Example



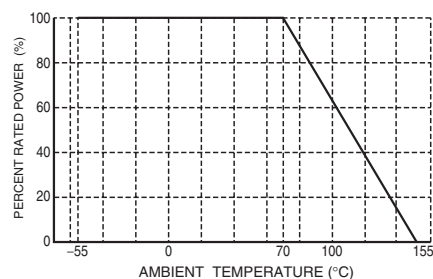
(Unit : mm)

Dimensions Part No.	A	B	C	D
PMR01	0.5	1.8	0.5	0.65
PMR03	0.5	2.5	0.9	1.0
PMR10	0.8	3.4	1.3	1.3
PMR18	1.0	4.0	1.8	1.5
PMR25	1.0	4.0	2.8	1.5
PMR50	1.8	6.0	2.8	2.1
PMR100	2.4	7.6	3.8	2.6

●Derating Curve

When the ambient temperature exceeds 70°C, power dissipation must be adjusted according to the derating curves below.

■ PMR01 / 03 / 10 / 18 / 25 / 50 / 100



●Characteristics

Test Items	Guaranteed Value	Test Conditions
Resistance	Max. 0.5mΩ	20°C Measuring method : Probes (Under terminations) Measure under terminations by 4 probes.
Variation of resistance with temperature	Max. 0.5mΩ	Measurement : +20 / -55 / +20 / +125°C
Overload	Max. 0.5mΩ	Rated power × 2.5, 2s
Solderability	A new uniform coating of minimum of 95% of the surface being immersed and no soldering damage.	Rosin·Ethanol : 25% (Weight) Soldering condition : 235±5°C Duration of immersion : 2.0±0.5s
Resistance to soldering heat	Max. 0.5mΩ No remarkable abnormality on the appearance.	Soldering condition : 260±5°C Duration of immersion : 10±1s
Rapid change of temperature	Max. 0.5mΩ	Test temp. : -55°C to +125°C 5cycle
Damp heat, steady state	Max. 0.5mΩ	40°C, 93%RH (Relative Humidity) Test time : 1,000h to 1,048h
Endurance at 70°C	Max. 0.5mΩ	70°C Rated power 1.5h : ON – 0.5h : OFF Test time : 1,000h to 1,048h
Endurance	Max. 0.5mΩ	155°C Test time : 1,000h to 1,048h
Resistance to solvent	Max. 0.5mΩ	23±5°C, Immersion cleaning, 5±0.5min Solvent : 2-propanol
Bend strength of the end face plating	Without mechanical damage such as breaks.	–

Compliance Standard(s) : IEC60115-8
JISC 5201-8

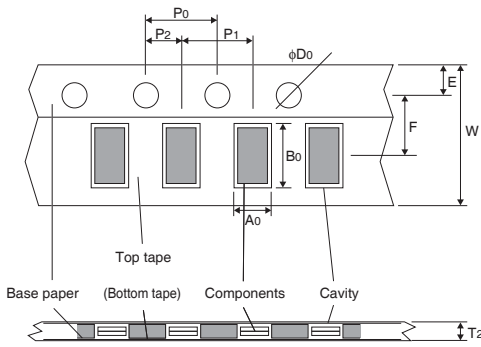
●Technical data

Parameter	Unit	PMR01	PMR03	PMR10	PMR18	PMR25	PMR50	PMR100
Weight	mg/pc	0.923	2.48	4.59	10.49	19.3	30.1	48.5

●Tape Dimensions

■Paper Tape

(Unit : mm)

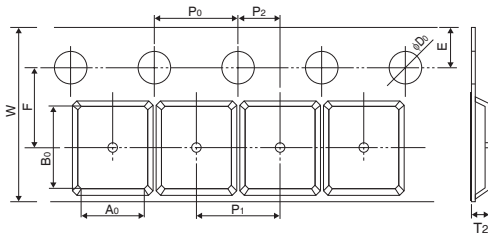


Part No.	W	F	E	A0	B0
PMR01	8.0±0.3	3.5±0.05	1.75±0.1	0.7±0.1	1.2±0.1
PMR03	8.0±0.3	3.5±0.05	1.75±0.1	0.95±0.1	1.75±0.1
PMR10	8.0±0.3	3.5±0.05	1.75±0.1	1.65 ^{+0.2} _{-0.1}	2.4 ^{+0.2} _{-0.1}
PMR18	8.0±0.3	3.5±0.05	1.75±0.1	1.95 ^{+0.1} _{-0.05}	3.5 ^{+0.15} _{-0.05}

Part No.	D0	P0	P1	P2	T2
PMR01	φ1.5 ^{+0.1} ₀	4.0±0.1	2.0±0.05	2.0±0.05	Max 1.1
PMR03	φ1.5 ^{+0.1} ₀	4.0±0.1	4.0±0.1	2.0±0.05	Max 1.1
PMR10	φ1.5 ^{+0.1} ₀	4.0±0.1	4.0±0.1	2.0±0.05	Max 1.1
PMR18	φ1.5 ^{+0.1} ₀	4.0±0.1	4.0±0.1	2.0±0.05	Max 1.1

■Embossed Tape

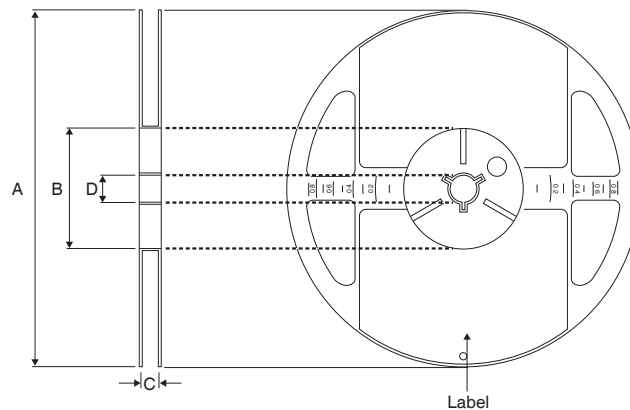
(Unit : mm)



Part No.	W	F	E	A0	B0
PMR25	8.0±0.3	3.5±0.05	1.75±0.1	3.0±0.1	3.5±0.1
PMR50	12.0±0.3	5.5±0.05	1.75±0.1	2.9±0.2	5.3±0.2
PMR100	12.0±0.3	5.5±0.05	1.75±0.1	3.5±0.2	6.7±0.2

Part No.	D0	P0	P1	P2	T2
PMR25	φ1.5 ^{+0.1} ₀	4.0±0.1	4.0±0.1	2.0±0.05	Max 1.1
PMR50	φ1.5 ^{+0.1} ₀	4.0±0.1	4.0±0.1	2.0±0.05	Max 1.1
PMR100	φ1.5 ^{+0.1} ₀	4.0±0.1	4.0±0.1	2.0±0.05	Max 1.1

●Reel Dimensions



ACCORDING TO EIAJ ET-7200B
(Unit : mm)

Part No.	A	B	C	D
PMR01	φ180 ⁰ _{-1.5}	φ60 ^{+1.0} ₀	9 ^{+1.0} ₀	φ13±0.2
PMR03				
PMR10				
PMR18			13 ^{+1.0} ₀	
PMR25				
PMR50				
PMR100				

Notes

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