

Ultra low ohmic resistors for current detection

PMR50

●Features

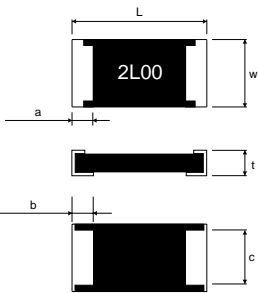
- 1) Ultra low-ohmic resistance range (1mΩ~)
- 2) Lowest height (≤0.6mm)
- 3) Improved current detection accuracy by trimming-less structure.
Highly recommended for large current / High speed switching circuit.
- 4) Completely Pb free product

●Quick reference

The design and specifications are subject to change without prior notice. Before ordering or using, please check the latest technical specifications.

Part No.	Size code	Rated power (70°C)	Resistance tolerance	Resistance value (mΩ)	Operating temperature range (°C)
PMR50	5025 (2010)	1W	F (±1%) J (±5%)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	−55 to +155

●External dimensions (Unit : mm)

	Part No.	Size code	L	W	t	a	b	c
	PMR50	5025 (2010)	5.0±0.20	2.5±0.20	0.52 to 0.32*±0.15	0.5±0.20	1.90 to 0.90*±0.20	1.95±0.20

* : Each value range varies with the resistance.

Resistors

●Product designation

P	M	R	5	0	H	Z	P	J	V																							
Part No.					Resistance tolerance				Special part number				Nominal resistance																			
					<table><tr><td>F</td><td>±1%</td></tr><tr><td>J</td><td>±5%</td></tr></table>				F	±1%	J	±5%	<table><tr><td>U</td><td>5 to 10mΩ</td></tr><tr><td>V</td><td>1 to 4mΩ</td></tr></table>				U	5 to 10mΩ	V	1 to 4mΩ	<table><tr><td colspan="2">Resistance code, 3 or 4 digits.</td></tr><tr><td>Resistance tolerance</td><td>Resistance code</td></tr><tr><td>F</td><td>: 4 digits</td></tr><tr><td>J</td><td>: 3 digits</td></tr></table>				Resistance code, 3 or 4 digits.		Resistance tolerance	Resistance code	F	: 4 digits	J	: 3 digits
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Packaging Specifications Code

Part No.	Code	Resistance tolerance		Packaging specifications	Reel	Basic ordering unit (pcs)
		J(±5%)	F(±1%)			
PMR50	HZP	⊙	⊙	Embossed tape (4mm Pitch)	φ180mm (7in.)	2,000

Reel (φ180) : Compatible with JEITA standard "EIAJ ET-7200B"

⊙ : Standard product

●Packaging

Reel

Diagram of a reel showing dimensions A, B, D, C, and a label. The reel is circular with a central hub and four spokes. The dimensions are defined as follows: A is the outer diameter, B is the inner diameter, D is the width of the reel, C is the width of the central hub, and the label is the central hub.

EIAJ ET-7200B compliant

(Unit : mm)

A	B	C	D
$\phi 180 \begin{smallmatrix} 0 \\ -1.5 \end{smallmatrix}$	$\phi 60 \begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$	$13 \begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$	$\phi 13 \pm 0.2$

Taping

Diagram of a resistor tape showing dimensions W, F, E, A₀, B₀, D₀, P₀, P₁, P₂, K. The tape is rectangular with a central hub and four spokes. The dimensions are defined as follows: W is the width of the tape, F is the width of the central hub, E is the width of the spokes, A₀ is the width of the central hub, B₀ is the width of the spokes, D₀ is the width of the central hub, P₀ is the pitch between the central hub and the first spoke, P₁ is the pitch between the first and second spokes, P₂ is the pitch between the second and third spokes, and K is the width of the central hub.

(Unit : mm)

W	F	E	A ₀	B ₀
12.0±0.3	5.5±0.05	1.75±0.1	2.9±0.2	5.3±0.2
D ₀	P ₀	P ₁	P ₂	K
$\phi 1.5 \begin{smallmatrix} +0.1 \\ 0 \end{smallmatrix}$	4.0±0.1	4.0±0.1	2.0±0.05	Max. 1.1

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