

Ultra-low Ohmic Resistors for Current Detection

PMR50

●Features

- 1) Ultra low-ohmic resistance range (1mΩ~)
- 2) Lowest height ($\leq 0.6\text{mm}$)
- 3) Improved current detection accuracy by trimming-less structure.
Highly recommended for large current / High speed switching circuit.
- 4) Completely Pb free product
- 5) ISO9001- / ISO/TS 16949- approved

●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	Temperature coefficient (ppm / °C)	Resistance value (mΩ)	Operating temperature range (°C)
PMR50	5025 (2010)	1W	F ($\pm 1\%$) J ($\pm 5\%$)	± 100	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	-55 to +155

●Dimensions (Unit : mm)

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

* : Each value range varies with the resistance.

Resistors

●Part No. Explanation

P	M	R	5	0	H	Z	P	J	V										
Part No.					Resistance tolerance		Special part number			Nominal resistance									
					F	±1%	U	5 to 10mΩ			<div>Resistance code, 3 or 4 digits.</div> <table><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 tolerance	Resistance code	F	: 4 digits	J	: 3 digits
Resistance tolerance	Resistance code																		
F	: 4 digits																		
J	: 3 digits																		
					J	±5%	V	1 to 4mΩ											
		Resistance Value (Ω)		Resistance Tolerance															
				J		F													
		1mΩ		1L0		1L00													
		2mΩ		2L0		2L00													
		3mΩ		3L0		3L00													
		4mΩ		4L0		4L00													
		5mΩ		5L0		5L00													
		6mΩ		6L0		6L00													
		7mΩ		7L0		7L00													
		8mΩ		8L0		8L00													
		9mΩ		9L0		9L00													
		10mΩ		10L		10L0													

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, C, D, and a label. The reel is EIAJ ET-7200B compliant.

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, and K.

(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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