

Ultra-low Ohmic Resistors for Current Detection

PMR50

●Features

- 1) Ultra low-ohmic resistance range ($1\text{m}\Omega\sim$)
- 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 ± 0.20	2.5 ± 0.20	$0.52 \text{ to } 0.32^* \pm 0.15$	0.5 ± 0.20	$1.90 \text{ to } 0.90^* \pm 0.20$	1.95 ± 0.20

* : Each value range varies with the resistance.

Resistors

●Part No. Explanation

Part No.				Resistance tolerance		Special part number		Nominal resistance	
P	M	R	50	H	Z	P	J	V	
				F	±1%	U	5 to 10mΩ	Resistance code, 3 or 4 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
								2mΩ	2L0
								3mΩ	3L0
								4mΩ	4L0
								5mΩ	5L0
								6mΩ	6L0
								7mΩ	7L0
								8mΩ	8L0
								9mΩ	9L0
								10mΩ	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 circular with a central hub and four spokes. The dimensions are defined as follows: A is the outer diameter, B is the inner diameter, C is the width of the reel, and D is the width of the central hub. A label is shown on 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, E, B0, A0, P0, P1, P2, K, and D0. The tape is rectangular with a central hub and four spokes. The dimensions are defined as follows: W is the width of the tape, E is the height of the central hub, B0 is the height of the reel, A0 is the width of the reel, P0 is the pitch of the central hub, P1 is the pitch of the reel, P2 is the pitch of the central hub, K is the width of the central hub, and D0 is the diameter 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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