

Ultra-Low Ohmic Resistors for Current Detection

PMR18

●Features

- 1) Ultra low-ohmic resistance range ($2\text{m}\Omega\sim$)
- 2) Lowest height ($\leq 0.5\text{mm}$)
- 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)
PMR18	3216 (1206)	3/4W	F (±1%) J (±5%)	±150	2, 3, 4, 5, 6, 7, 8, 9, 10	−55 to +155

●Dimensions (Unit : mm)

Part No.	Size code	L	W	t	b
PMR18	3216 (1206)	3.2 ± 0.15	1.6 ± 0.15	$0.42\text{ to }0.28^{\circ}\pm 0.15$	$0.9\text{ to }0.4^{\circ}\pm 0.15$

* : Each value range varies with the resistance.

Resistors

●Part No. Explanation

Part No.				Resistance tolerance		Special part number		Nominal resistance			
P	M	R	18	E	Z	P	J	V			
				F	±1%	U	5 to 10mΩ	Resistance code, 3 or 4 digits.			
				J	±5%	V	1 to 4mΩ				
								Resistance tolerance			
								Resistance code			
								F : 4 digits			
								J : 3 digits			
								Resistance Value (Ω)			
								Resistance Tolerance			
								J			
								F			
								2mΩ			
								3mΩ			
								4mΩ			
								5mΩ			
								6mΩ			
								7mΩ			
								8mΩ			
								9mΩ			
								10mΩ			

Packaging Specifications Code

Part No.	Code	Resistance tolerance		Packaging specifications	Reel	Basic ordering unit (pcs)
		J(±5%)	F(±1%)			
PMR18	EZP	◎	◎	Paper tape (4mm Pitch)	φ180mm (7in.)	5,000

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 diameter of the central hub. A label is shown on the central hub.

EIAJ ET-7200B compliant

(Unit : mm)

A	B	C	D
$\phi 180 \begin{smallmatrix} 0 \\ -1.5 \end{smallmatrix}$	$\phi 60 \begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$	$9 \begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$	$\phi 13 \pm 0.2$

Taping

Diagram of a tape showing dimensions W, F, E, A₀, B₀, D₀, P₀, P₁, P₂, and K. The tape is shown with a top tape and a base paper. The dimensions are defined as follows: W is the width of the tape, F is the thickness of the tape, E is the thickness of the top tape, A₀ is the width of the cavity, B₀ is the width of the components, D₀ is the diameter of the components, P₀ is the pitch of the components, P₁ is the pitch of the top tape, and P₂ is the pitch of the base paper. The labels 'Top tape', 'Base paper', 'Components', and 'Cavity' are shown pointing to their respective parts.

(Unit : mm)

W	F	E	A ₀	B ₀
8.0 ± 0.3	3.5 ± 0.05	1.75 ± 0.1	$1.95 \begin{smallmatrix} +0.1 \\ -0.05 \end{smallmatrix}$	$3.5 \begin{smallmatrix} +0.15 \\ -0.05 \end{smallmatrix}$
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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