

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 ($\pm 1\%$) J ($\pm 5\%$) | ± 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 | $0.42 \text{ to } 0.28^{\text{B}} \pm 0.15$ | $0.9 \text{ to } 0.4^{\text{B}} \pm 0.15$ |

* : 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 central cavity and four components. The dimensions are defined as follows: W is the width of the tape, F is the height of the tape, E is the thickness of the tape, A₀ is the width of the cavity, B₀ is the height of the cavity, D₀ is the diameter of the central hole, P₀ is the pitch between the central hole and the first component, P₁ is the pitch between the first and second components, P₂ is the pitch between the second and third components, and K is the pitch between the third and fourth components.

(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 |

Notes

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