

Ultra-Low Ohmic Resistors for Current Detection

PMR10

●Features

- 1) Ultra low-ohmic resistance range (2mΩ~)
- 2) Improved current detection accuracy by trimming-less structure.
Highly recommended for large current / High speed switching circuit.
- 3) Completely Pb free product
- 4) ISO9001- / ISO/TS 16949-approved

●Ratings

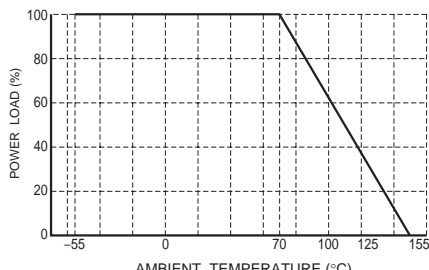
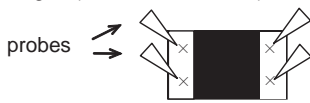
Item	Conditions	Specifications
Rated power	For resistors operated at the ambient temperature in excess of 70 , the load shall be derated in accordance with Fig.1  Fig.1	0.5W (1 / 2W) at 70°C
Rated voltage Rated current	Rated voltage and current are determined from the following. $E = \sqrt{P \times R}$ $I = \sqrt{P / R}$ E: Rated voltage (V) I : Rated current (A) P: Rated power (W) R: Nominal resistance (Ω)	
Nominal resistance	See Table 1.	
Operating temperature		-55°C to +155°C

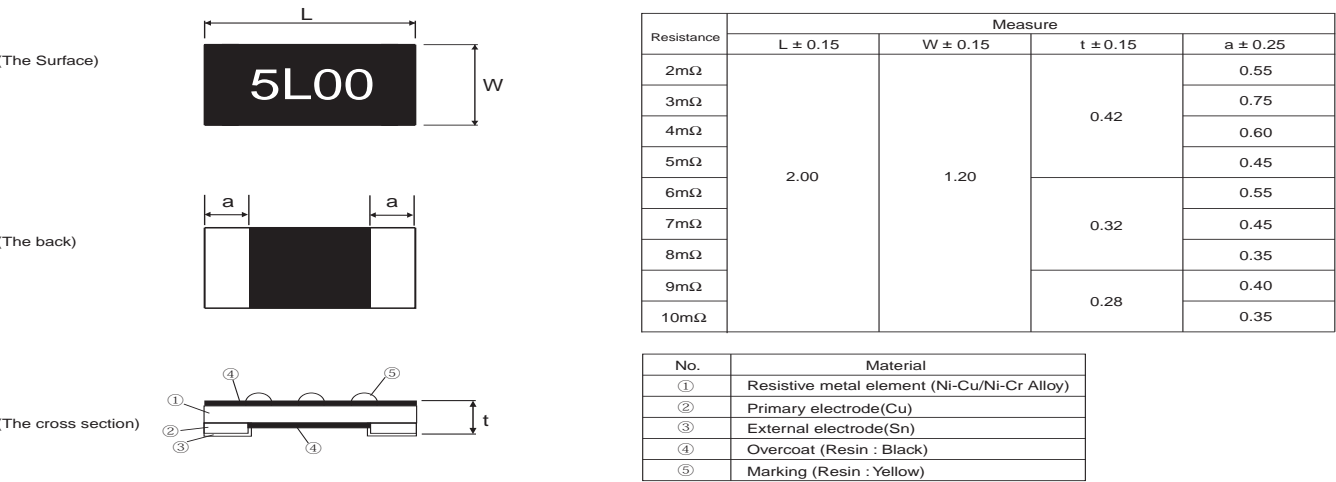
Table.1

RESISTANCE (mΩ)	TOLERANCE	SPECIAL CODE	TEMPERATURE COEFFICIENT (ppm / °C)
2,3,4	F (±1%) G (±2%) J (±5%)	V	±150
5,6,7,8,9,10		U	

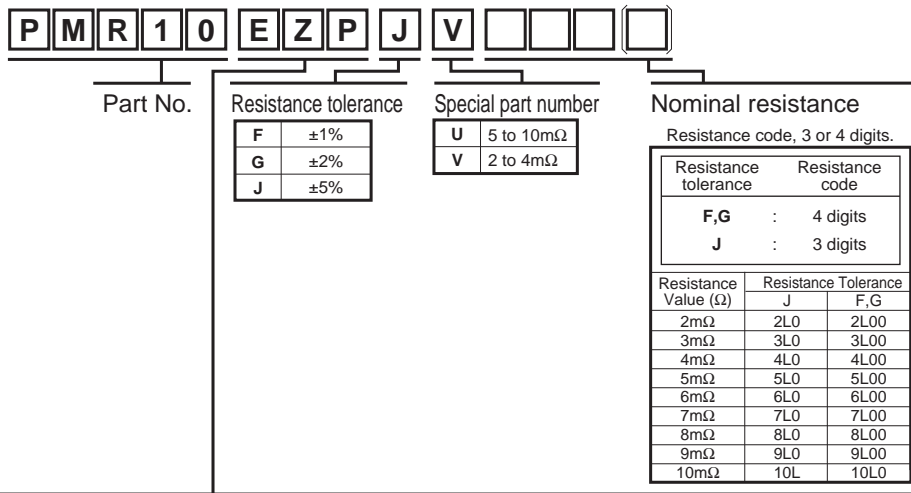
●Characteristics

Item	Guaranteed value	Test conditions (JIS C 5201-1)
	Resistor type	
Resistance	F : $\pm 1\%$ G : $\pm 2\%$ J : $\pm 5\%$	JIS C 5201-1 4.5 Measuring method : Measure under terminations by 4 probes. Fig.2 (Under terminations) 
Variation of resistance with temperature	See Table.1	JIS C 5201-1 4.8 Measurement : 25 / -55 / +25 / +125°C
Overload	$\pm 2.0\%$	JIS C 5201-1 4.13 Rated power $\times 2.5$, 2s.
Solderability	A new uniform coating of minimum of 95% of the surface being immersed and no soldering damage.	JIS C 5201-1 4.17 Rosin-Ethanol (25%WT) Soldering condition : $235 \pm 5^\circ\text{C}$ Duration of immersion : $2.0 \pm 0.5\text{s}$.
Resistance to soldering heat	$\pm 1.0\%$ No remarkable abnormality on the appearance.	JIS C 5201-1 4.18 Soldering condition : $260 \pm 5^\circ\text{C}$ Duration of immersion : $10 \pm 1\text{s}$.
Rapid change of temperature	$\pm 1.0\%$	JIS C 5201-1 4.19 Test temp. : -55°C to $+125^\circ\text{C}$ 5cyc
Damp heat, steady state	$\pm 3.0\%$	JIS C 5201-1 4.24 40°C , 93%RH Test time : 56days
Endurance at 70°C	$\pm 3.0\%$	JIS C 5201-1 4.25.1 70°C , Rated power 1.5h : ON – 0.5h : OFF Test time : 1,000h to 1,048h
Endurance	$\pm 3.0\%$	JIS C 5201-1 4.25.3 155°C Test time : 1,000h to 1,048h
Resistance to solvent	$\pm 0.5\%$	JIS C 5201-1 4.29 $23 \pm 5^\circ\text{C}$ Solvent : 2-propanol
Bend strength of the end face plating	Without open	JIS C 5201-1 4.33

●Dimensions&Construction



●Part No. Explanation

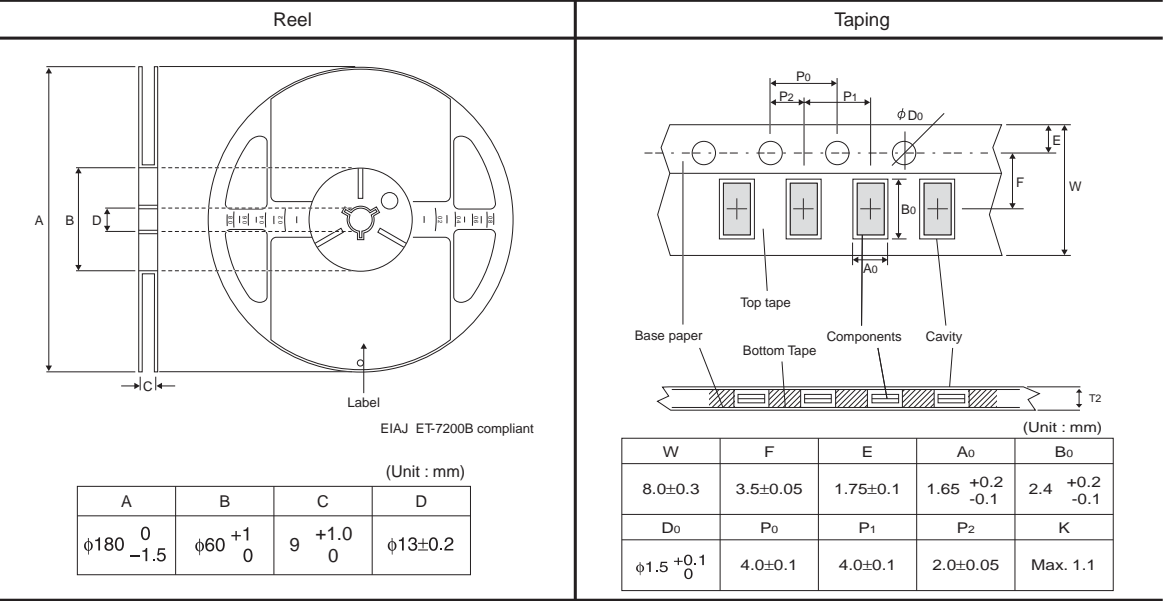


Packaging Specifications Code

Part No.	Code	Resistance tolerance			Packaging specifications	Reel	Basic ordering unit (pcs)
		J(±5%)	G(±2%)	F(±1%)			
PMR10	EZP	◎	◎	◎	Paper tape (4mm Pitch)	φ180mm (7in.)	5,000

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

●Packaging



Notes

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