

Anti-Surge Thick Film Chip Resistors

1206

Type: **ERJP08**

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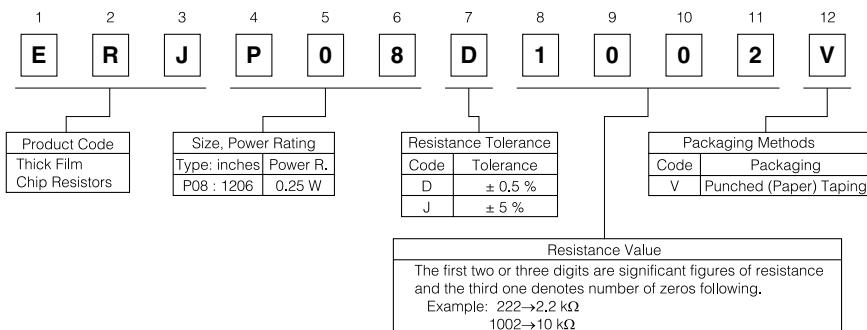
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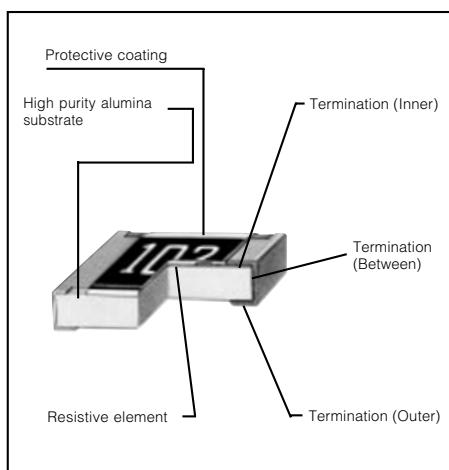
■ Features

- Characteristic: Better Anti-Surge characteristic than metal film resistors
- High reliability
Metal glaze thick film resistive element and three layers of electrodes result in high reliability
- Solderability
Suitable for both reflow soldering and flow soldering
- High power...0.25 W(3216 size)
Thick film resistor with excellent Anti-Pulse characteristic and high rated power
- Approved under the ISO 9001 system
Approved under the QS-9000 system

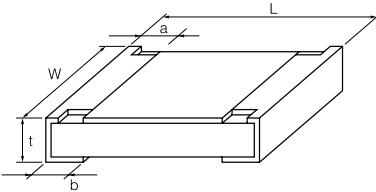
■ Explanation of Part Numbers



■ Construction



■ Dimensions in mm (not to scale)



Type (inches)	Dimensions (mm)					Weight (1000 pcs.)
	L	W	a	b	t	
ERJP08 (1206)	3.20 ^{+0.05} _{-0.20}	1.60 ^{+0.05} _{-0.15}	0.50 ^{+0.20}	0.50 ^{+0.20}	0.60 ^{+0.10}	10 g

■ Ratings

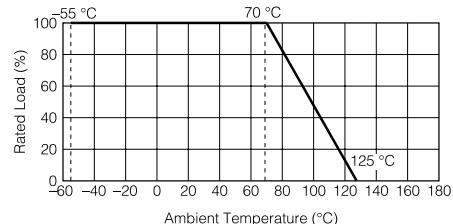
Type (inches)	Power Rating at 70 °C (W)	Limiting Element Voltage (Maximum RCWV) ⁽¹⁾ (V)	Maximum Overload Voltage ⁽²⁾ (V)	Resistance Tolerance(%)	Resistance Range (Ω)		T.C.R. x10 ⁻⁶ °C (ppm/°C)	Standard Resistance Values
					min.	max.		
ERJP08 (1206)	0.25	200	400	± 5	10	1 M	±200	E24(3digits)
				± 0.5	10	1 M	±100	E96(4digits)only D

(1) Rated Continuous Working Voltage (RCWV) should be determined from $RCWV = \sqrt{\text{Power Rating} \times \text{Resistance Values}}$, or Limiting Element Voltage (max. RCWV) listed above, whichever is less.

(2) Overload (Short-time Overload) Test Voltage (SOTV) should be determined from $SOTV = 2.5 \times \text{Power Rating}$ or max. Overload Voltage listed above whichever is less.

Power Derating Curve

For resistors operated in ambient temperatures above 70 °C, power rating should be derated in accordance with the figure on the right.



■ Packaging Methods

● Standard Quantity

Type (inches)	Thickness (mm)	Punched (Paper) Taping (4 mm pitch)
ERJP08 (1206)	0.6	5000 pcs./reel

● Taping Reel

Dimensions (mm)	ϕA	ϕB	ϕC	W	T
	180.0 ⁰ _{-3.0}	60 min.	13.0 ^{±1.0}	9.0 ^{±1.0}	11.4 ^{±2.0}

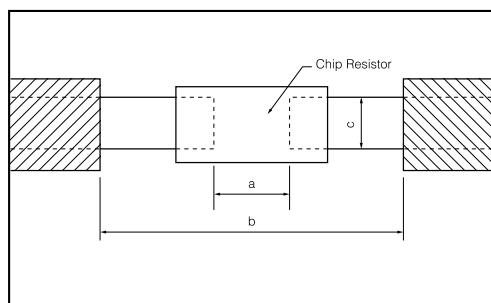
● Punched (Paper) Taping

Dimensions (mm)	A	B	W	F	E
	2.00 ^{±0.15}	3.60 ^{±0.20}	8.00 ^{±0.20}	3.50 ^{±0.05}	1.75 ^{±0.10}
Dimensions (mm)	P ₁	P ₂	P ₀	ϕD_0	T
	4.00 ^{±0.10}	2.00 ^{±0.05}	4.00 ^{±0.10}	1.50 ^{±0.10}	0.84 ^{±0.05}

△ Safety Precautions

In the case of flow soldering, the land width must be smaller than the Chip Resistor width to control the solder amount properly. Generally, the land width should be 0.7 to 0.8 times the width of chip resistor (W).

In the case of reflow soldering, solder amount can be adjusted, therefore the land width should be set to 1.0 to 1.3 times chip resistor width (W).



Type (inches)	Dimensions (mm)		
	a	b	c
ERJP08 (1206)	2 to 2.4	4.4 to 5	1.2 to 1.8

1. If transient load (heavy load in a short time) like pulse is expected to be applied, carry out evaluation and confirmation test with the resistors actually mounted on your own board.
When the load of more than rated power is applied under the load condition at steady state, it may impair performance and/or reliability of resistor.
Never exceed the rated power.
2. Chlorine type or other high-activity flux is not recommended as the residue may affect performance or reliability of resistors.
3. When soldering with soldering iron, never touch the body of the chip resistor with a tip of the soldering iron. When using a soldering iron with a tip at high temperature, solder for as short a time as possible (three seconds or less up to 350 °C).
4. Avoid physical shock to the resistor and nipping of the resistor with hard tool (a pair of pliers or tweezers) as it may damage protective film or the body of resistor and may affect resistor's performance.