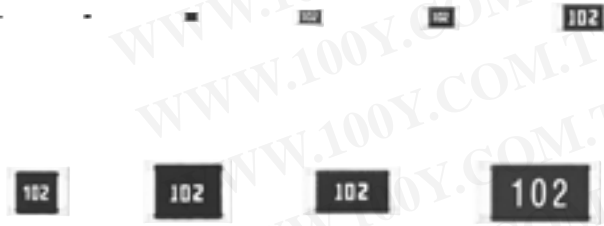


Thick Film Chip Resistors 01005, 0201, 0402, 0603, 0805, 1206, 1210, 1812, 2010, 2512

Type: **ERJ XG, 1G, 2G, 3G, 6G, 8G,
14, 12, 12Z, 1T**



■ Features

- Small size and lightweight
- High reliability
Metal glaze thick film resistive element and three layers of electrodes
- Compatible with placement machines
Taping packaging available
- Suitable for both reflow and flow soldering
- Reference Standards
IEC 60115-8, JIS C 5201-8, EIAJ RC-2134B
- AEC-Q200 qualified (Exemption ERJXG)
- RoHS compliant

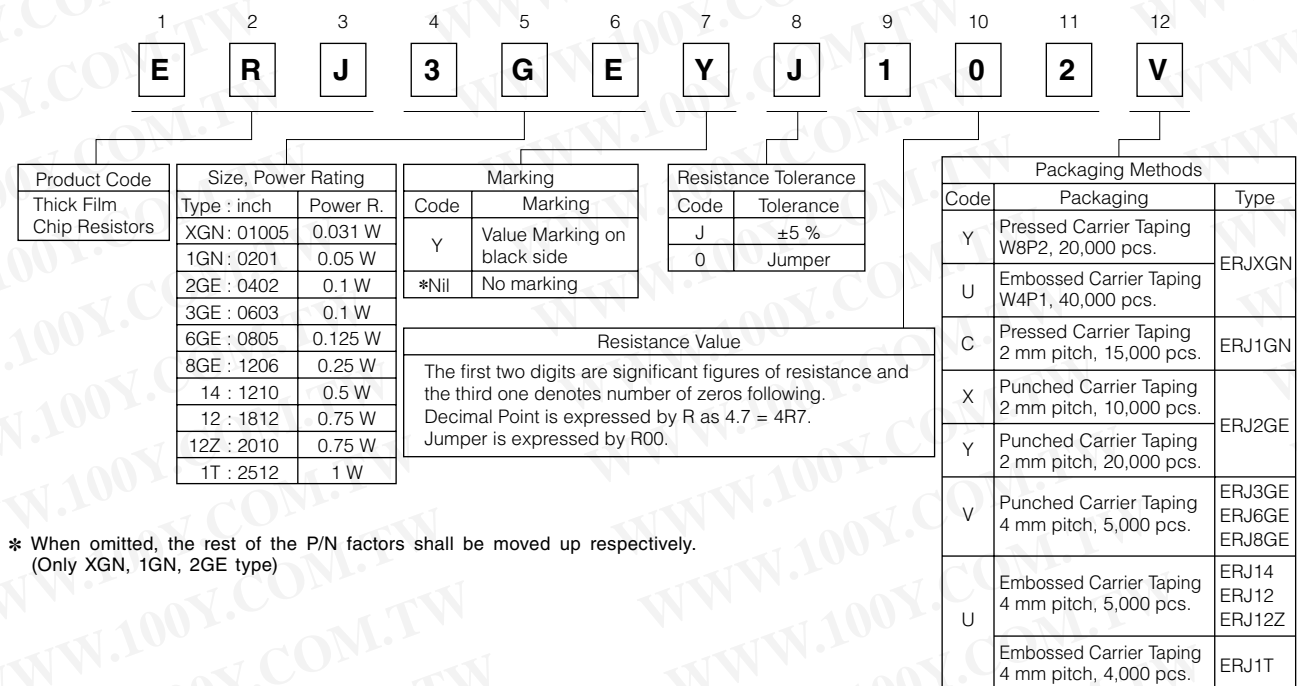
勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

■ Packaging Methods, Land Pattern, Soldering Conditions and Safety Precautions

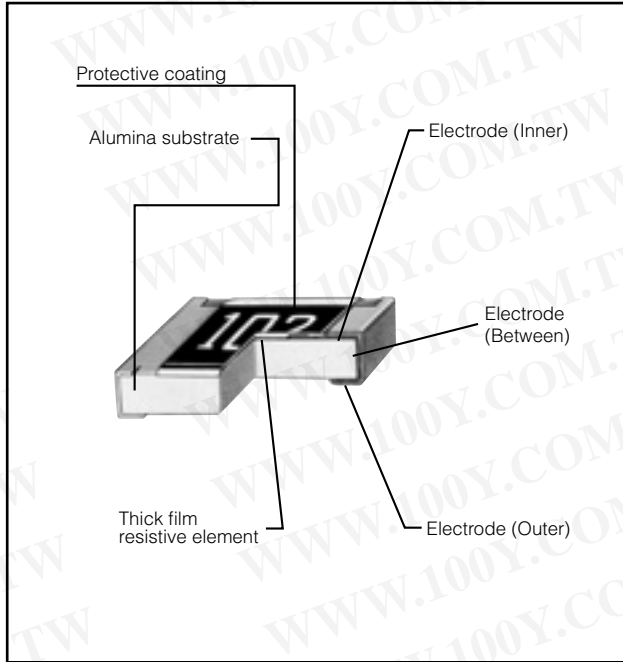
Please see Data Files

■ Explanation of Part Numbers

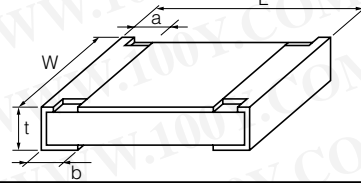
- ERJXGN, 1GN, 2GE, 3GE, 6GE, 8GE, 14, 12, 12Z, 1T Series, ±5 % type



Construction



Dimensions in mm (not to scale)



Type (inch size)	Dimensions (mm)					Mass (Weight) (g/1000 pcs.)
	L	W	a	b	t	
ERJXG (01005)	0.40 \pm 0.02	0.20 \pm 0.02	0.10 \pm 0.03	0.10 \pm 0.03	0.13 \pm 0.02	0.04
ERJ1G (0201)	0.60 \pm 0.03	0.30 \pm 0.03	0.10 \pm 0.05	0.15 \pm 0.05	0.23 \pm 0.03	0.15
ERJ2G (0402)	1.00 \pm 0.05	0.50 \pm 0.05	0.20 \pm 0.10	0.25 \pm 0.05	0.35 \pm 0.05	0.8
ERJ3G (0603)	1.60 \pm 0.15	0.80 \pm 0.15	0.30 \pm 0.20	0.30 \pm 0.15	0.45 \pm 0.10	2
ERJ6G (0805)	2.00 \pm 0.20	1.25 \pm 0.10	0.40 \pm 0.20	0.40 \pm 0.20	0.60 \pm 0.10	4
ERJ8G (1206)	3.20 \pm 0.05	1.60 \pm 0.15	0.50 \pm 0.20	0.50 \pm 0.20	0.60 \pm 0.10	10
ERJ14 (1210)	3.20 \pm 0.20	2.50 \pm 0.20	0.50 \pm 0.20	0.50 \pm 0.20	0.60 \pm 0.10	16
ERJ12 (1812)	4.50 \pm 0.20	3.20 \pm 0.20	0.50 \pm 0.20	0.50 \pm 0.20	0.60 \pm 0.10	27
ERJ12Z (2010)	5.00 \pm 0.20	2.50 \pm 0.20	0.60 \pm 0.20	0.60 \pm 0.20	0.60 \pm 0.10	27
ERJ1T (2512)	6.40 \pm 0.20	3.20 \pm 0.20	0.65 \pm 0.20	0.60 \pm 0.20	0.60 \pm 0.10	45

Ratings

<For Resistor>

Type (inch size)	Power Rating at 70 °C (W)	Limiting Element Voltage ⁽¹⁾ (V)	Maximum Overload Voltage ⁽²⁾ (V)	Resistance Tolerance (%)	Resistance Range (Ω)	T.C.R. ($\times 10^{-6}/^{\circ}\text{C}$)	Category Temperature Range ($^{\circ}\text{C}$)
ERJXG (01005)	0.031	15	30	± 5	4.7 to 1 M (E24)	<10 Ω : -100 to +600 10 Ω to 100 Ω : ± 300 100 Ω : ± 200	-55 to +125
ERJ1G (0201)	0.05	25	50	± 5	1 to 10 M (E24)	<10 Ω : -100 to +600	-55 to +125
ERJ2G (0402)	0.1	50	100	± 5	1 to 10 M (E24)		-55 to +155
ERJ3G (0603)	0.1	75	150	± 5	1 to 10 M (E24)	10 Ω to 1 M Ω : ± 200	-55 to +155
ERJ6G (0805)	0.125	150	200	± 5	1 to 10 M (E24)		-55 to +155
ERJ8G (1206)	0.25	200	400	± 5	1 to 10 M (E24)		-55 to +155
ERJ14 (1210)	0.5	200	400	± 5	1 to 10 M (E24)	1 M Ω : -400 to +150	-55 to +155
ERJ12 (1812)	0.75	200	500	± 5	1 to 10 M (E24)		-55 to +155
ERJ12Z (2010)	0.75	200	500	± 5	1 to 10 M (E24)	-400 to +150	-55 to +155
ERJ1T (2512)	1	200	500	± 5	1 to 1 M (E24)		-55 to +155

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

(2) Overload (Short-time Overload) Test Voltage (SOTV) shall be determined from $\text{SOTV} = 2.5$ (Only ERJ2G=2.0) \times Power Rating or max. Overload Voltage listed above whichever less.

<For Jumper>

Type (inch size)	Rated Current (A)	Maximum Overload Current (A)
ERJXG (01005)	0.5	1
ERJ1G (0201)		
ERJ2G (0402)		
ERJ3G (0603)	1	2
ERJ6G (0805)		
ERJ8G (1206)		
ERJ14 (1210)	2	4
ERJ12 (1812)		
ERJ12Z (2010)		
ERJ1T (2512)		

Power Derating Curve

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

