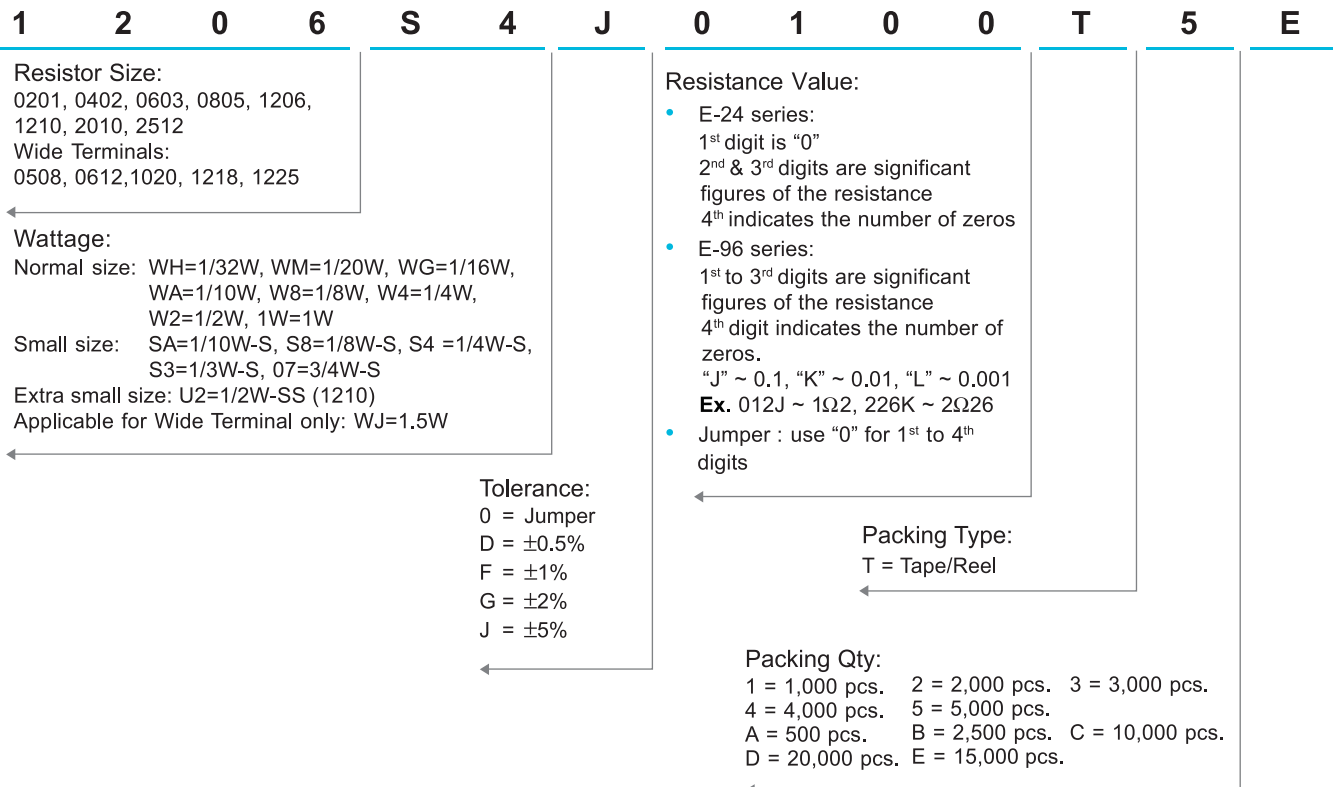


# Thick Film Chip Resistors

## Performance Specification

Temperature Coefficient	1Ω ~ 10Ω                    ±400PPM/°C 11Ω ~ 100Ω                ±200PPM/°C >100Ω                       ±100PPM/°C    (0201: >100Ω ≤ ±200PPM/°C)
Short Time Overload	±5%: ±(2.0% + 0.1Ω)Max ±1%: ±(1.0% + 0.1Ω)Max
Insulation Resistance	Min. 1,000 Mega Ohm
Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Terminal Bending	±(1.0% + 0.05Ω) Max
Soldering Heat	Resistance change rate is ±(1.0% + 0.05Ω)Max
Solderability	Min. 95% coverage.
Temperature Cycling	±5% : ±(1.0% + 0.05Ω)Max ±1% : ±(0.5% + 0.05Ω)Max
Humidity (Steady State)	±5% : ±(3.0% + 0.1Ω)Max ±1% : ±(0.5% + 0.1Ω)Max
Load Life in Humidity	±5% : ±(3.0% + 0.1Ω)Max ±1% : ±(1.0% + 0.1Ω)Max
Load Life	±5% : ±(3.0% + 0.1Ω)Max ±1% : ±(1.0% + 0.1Ω)Max

## Ordering Procedure: Ex.: 1206, 1/4W-S, +/-5%, 10Ω T/R-5000



**Note :**

- 1.) Special resistance value, tolerance, T.C.R. requirement is available on a case-to-case basis.
- 2.) Zero ohm chip tolerance 5% use "J"
- 3.) Standard reel size = 7"
- 4.) 4", 10", & 13" reels are available upon request

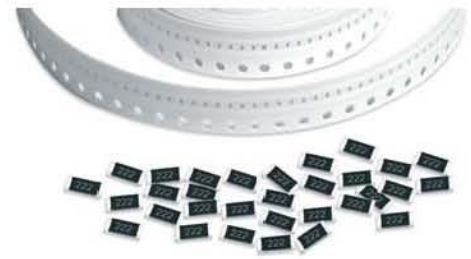
**Special Feature:**  
 E = Lead (Pb) Free Plating Type/  
 RoHS compliant



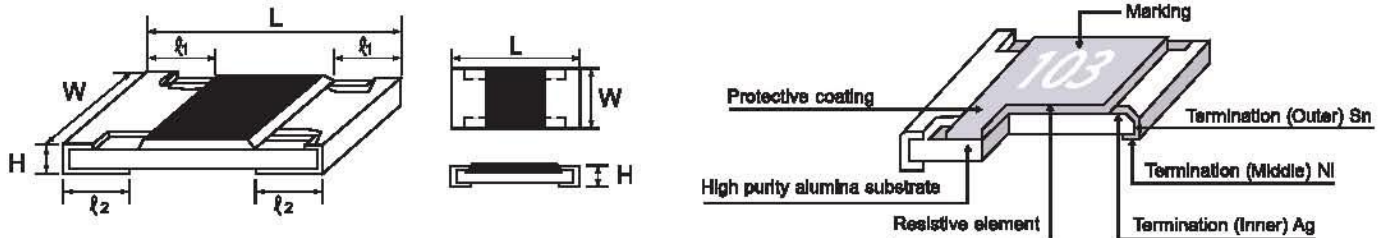
## Thick Film Chip Resistors

### Features

- Small size and light weight
- Suitable for both flow and reflow soldering
- Reduction of assembly costs



### Dimension



Type	Power Rating at 70°C	Max Working Voltage	Max Overload Voltage	Dielectric Withstanding Voltage	Tolerance %	Resistance Range	Dimension (mm)				
							L	W	H	l <sub>1</sub>	l <sub>2</sub>
0201 (0603)	1/20W	0.5A	1A	-	Jumper	<50mΩ	0.60±0.03	0.30±0.03	0.23±0.03	0.10±0.05	0.15±0.05
		25V	50V	-	±1% ±2% ±5%	10Ω ~ 1MΩ 10Ω ~ 1MΩ 1Ω ~ 1MΩ					
0402 (1005)	1/16W	1A	2A		Jumper	<50mΩ	1.00±0.10	0.50±0.05	0.35±0.05	0.20±0.10	0.25±0.10
		50V	100V	100V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					
0603 (1608)	1/10W-S 1/16W	1A	2A		Jumper	<50mΩ	1.60±0.10	0.80 <sup>+0.15</sup> -0.10	0.45±0.10	0.30±0.20	0.30±0.20
		50V	100V	300V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					
(0805) (2012)	1/8W-S 1/10W	2A	5A		Jumper	<50mΩ	2.00±0.15	1.25 <sup>+0.15</sup> -0.10	0.55±0.10	0.40±0.20	0.40±0.20
		150V	300V	500V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					
1206 (3216)	1/4W-S 1/8W	2A	10A		Jumper	<50mΩ	3.10±0.15	1.55 <sup>+0.15</sup> -0.10	0.55±0.10	0.45±0.20	0.45±0.20
		200V	400V	500V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					
1210 (3225)	1/2W-SS 1/3W-S 1/4W	2A	10A		Jumper	<50mΩ	3.10±0.10	2.60±0.15	0.55±0.10	0.50±0.25	0.50±0.20
		200V	400V	500V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					
2010 (5025)	3/4W-S 1/2W	2A	10A		Jumper	<50mΩ	5.00±0.10	2.50±0.15	0.55±0.10	0.60±0.25	0.50±0.20
		200V	400V	500V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					
2512 (6432)	1W	2A	10A		Jumper	<50mΩ	6.35±0.10	3.20±0.15	0.55±0.10	0.60±0.25	0.50±0.20
		200V	400V	500V	±1% ±2% ±5%	10Ω ~ 1MΩ 1Ω ~ 10MΩ 1Ω ~ 10MΩ					

### Note:

- 1.) Metric information inside parenthesis.
- 2.) Standard Operating Temp (°C): -55 ~ +155
- 3.) Standard: E96 series: 1%  
E24 series: 2%, 5%, 10%

### Derating Curve

