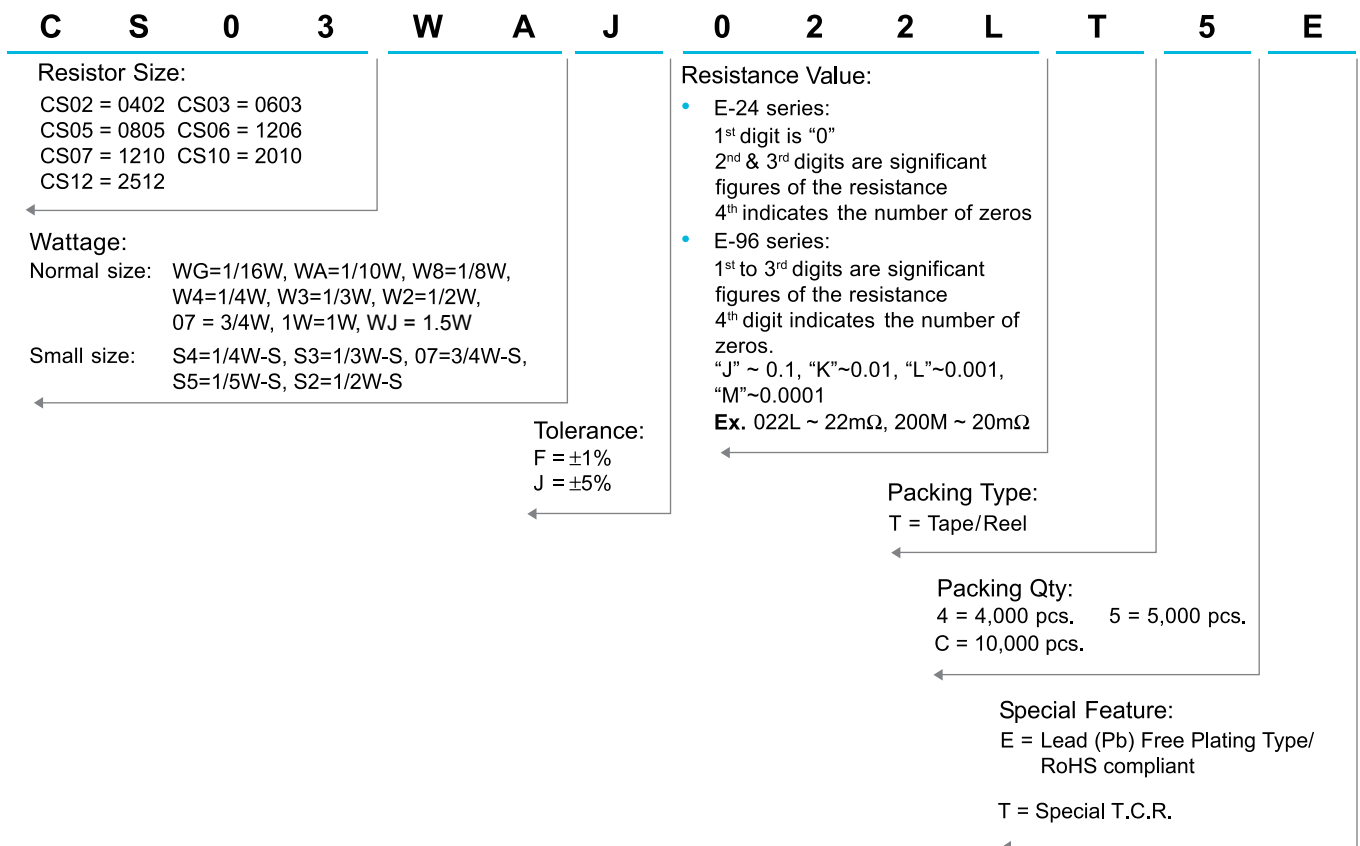


# Current Sensing Chip Resistors

## Performance Specification

Short Time Overload	1%: $\pm(1.0\%+0.005\Omega)$ Max 5%: $\pm(2.0\%+0.005\Omega)$ Max
Terminal Bending	$\pm(1.0\% + 0.005\Omega)$ Max
Solderability	Min. 95% coverage.
Temperature Cycling	$\pm(1.0\%+0.05\Omega)$ Max
Soldering Heat	$\pm(1.0\% + 0.05\Omega)$ Max
Load Life in Humidity	5%: $\pm(3.0\% + 0.05\Omega)$ Max 1%: $\pm(1.0\% + 0.05\Omega)$ Max
Load Life	5%: $\pm(3.0\% + 0.05\Omega)$ Max 1%: $\pm(1.0\% + 0.05\Omega)$ Max

Ordering Procedure: Ex.: CS03, 1/10W, +/-5%, 22mΩ T/R-5000

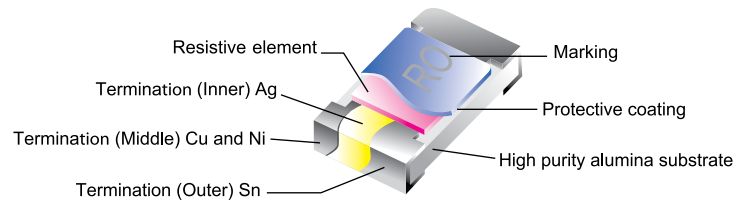
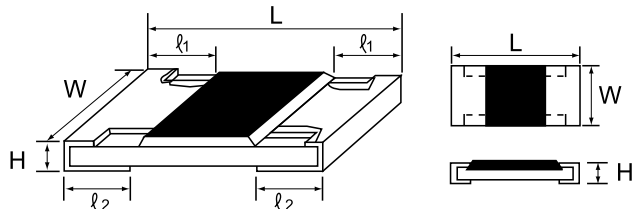


# Current Sensing Chip Resistors

## Features

- Ultra low Value
- Low Temperature Coefficient
- Suitable for wave and reflow soldering
- Application: Power supply
- High Power rating available upon request

## Dimension



Type	Power Rating at 70°C	Dielectric Withstanding Voltage	Tolerance %	Resistance Range (mΩ)	T.C.R. (PPM/°C)	Dimension (mm)				
						L	W	H	l <sub>1</sub>	l <sub>2</sub>
CS02 (0402)	1/16W	-	±1% ±5%	50mΩ ~ 100mΩ	±400	1.00±0.05	0.50±0.05	0.32±0.10	0.25±0.10	0.20±0.10
				101mΩ ~ 500mΩ	±300					
				501mΩ ~ 1Ω	±200					
CS03 (0603)	1/10W, 1/5W-S	300V	±1% ±5%	20mΩ ~ 32mΩ	±600	1.60±0.10	0.80±0.15	0.45±0.10	0.30±0.20	0.30±0.20
				33mΩ ~ 50mΩ	±500					
				50.1mΩ ~ 100mΩ	±400					
				101mΩ ~ 500mΩ	±300					
				501mΩ ~ 1Ω	±200					
CS05 (0805)	1/8W, 1/4W-S	500V	±1% ±5%	20mΩ ~ 24mΩ	±600	2.00±0.15	1.25±0.15	0.55±0.10	0.35±0.25	0.40±0.25
				25mΩ ~ 100mΩ	±400					
				101mΩ ~ 500mΩ	±300					
				501mΩ ~ 10Ω	±200					
CS06 (1206)	1/4W, 1/3W-S	500V	±1% ±5%	20mΩ ~ 50mΩ	±400	3.10±0.20	1.55±0.15	0.55±0.10	0.50±0.30	0.40±0.25
				50.1mΩ ~ 100mΩ	±300					
				101mΩ ~ 10Ω	±200					
CS07 (1210)	1/3W, 1/2WS	500V	±1% ±5%	20mΩ ~ 50mΩ	±400	3.00±0.20	2.55±0.20	0.55±0.10	0.50±0.30	0.50±0.25
				50.1mΩ ~ 100mΩ	±200					
				101mΩ ~ 10Ω	±200					
CS10 (2010)	1/2W, 3/4WS	500V	±1% ±5%	20mΩ ~ 50mΩ	±400	5.00±0.20	2.45±0.20	0.60±0.15	0.60±0.30	0.50±0.25
				50.1mΩ ~ 100mΩ	±200					
				101mΩ ~ 10Ω	±200					
CS12 (2512)	1W	500V	±1% ±5%	10mΩ ~ 19mΩ	±600	6.35±0.20	3.20±0.20	0.60±0.15	0.60±0.30	0.70±0.40
				20mΩ ~ 50mΩ	±400					
				50.1mΩ ~ 100mΩ	±200					
				101mΩ ~ 10Ω	±200					

**Note:**

- 1.) Standard Operating Temp (°C): -55 ~ +155
- 2.) Standard : E-96 Series : 1%  
E-24 Series : 5%
- 3.) High power available on case to case basis.