EN: This Datasheet/Document is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

Current Sensing Chip Resistors

Performance Specification

Short Time Overload	1%: ± (1.0% + 0.005Ω)Max 5%: ± (2.0% + 0.005Ω)Max
Terminal Bending	±(1.0% + 0.005Ω)Max
Solderability	Min. 95% coverage.
Temperature Cycling	±(1.0% + 0.005Ω)Max
Soldering Heat	±(1.0% + 0.005Ω)Max
Load Life in Humidity	5% : ±(3.0% + 0.005Ω)Max 1% : ±(1.0% + 0.005Ω)Max
Load Life	5% : ±(3.0% + 0.005Ω)Max 1% : ±(1.0% + 0.005Ω)Max
Insulation Resistance	Min. 1,000 Mega Ohm
Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.

CS07 size in 0.75W 0.1 ~ 1Ω 100PPM/°C could be provided specially (* CS07 0.75W 0.1 ~ 1Ω 100PPM/°C)

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

C S 0 3 W A J 0 2 2 L T 5 E

Resistor Size:
CS03 = 0603, CS05 = 0805,
CS06 = 1206, CS07 = 1210,
CS10 = 2010, CS12 = 2512

Wattage:
Normal size: WA=1/10W, W8=1/8W,W4=1/4W, W3=1/3W, W2=1/2W,34=3/4W, 1W=1W, WJ=1.5W
Small size: S4=1/4W-S, S3=1/3W-S, 07=3/4W-S, S5=1/5W-S, S2=1/2W-S

Tolerance:
F = ±1%
J = ±5%

Resistance Value:
- E-24 series:
  1st digit is "0"
  2nd & 3rd digits are significant figures of the resistance
  4th indicates the number of zeros
- E-96 series:
  1st to 3rd digits are significant figures of the resistance
  4th digit indicates the number of zeros.
  "J" ~0.1, "K" ~ 0.01, "L" ~ 0.001, "M" ~0.0001
  Ex. 022J ~ 22mΩ, 200M ~ 20mΩ

Packing Type:
T = Tape/Reel

Packing Qty:
4 = 4,000 pcs. 5 = 5,000 pcs.

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

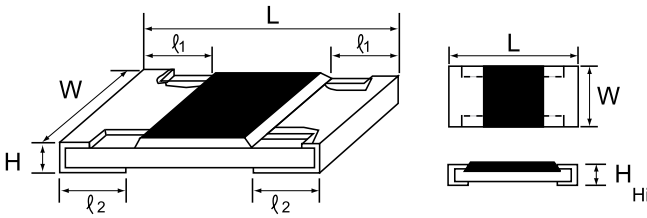
T = Special T.C.R.

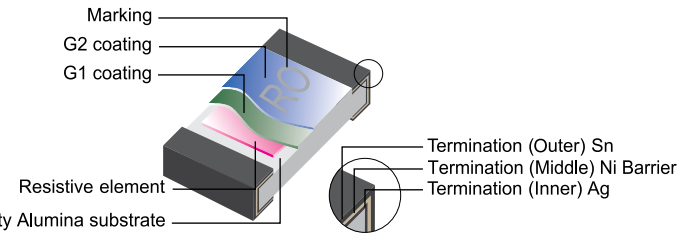
Current Sensing Chip Resistors

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	ℓ1	ℓ2
CS03 (0603)	1/10W, 1/5W-S	300V	±1% ±5%	20mΩ ~ 29.9mΩ	±800	1.60±0.10	0.80 $^{+0.15}_{-0.10}$	0.45±0.10	0.30±0.20	0.30±0.20
				30mΩ ~ 32.9mΩ	±600					
				33mΩ ~ 50mΩ	±400					
				50.1mΩ ~ 0.1Ω	±300					
				0.11Ω ~ 1Ω	±200					
CS05 (0805)	1/8W, 1/4W-S	500V	±1% ±5%	10mΩ ~ 15mΩ	±800	2.00±0.15	1.25 $^{+0.15}_{-0.10}$	0.55±0.10	0.40±0.20	0.40±0.20
				15.1mΩ ~ 25mΩ	±600					
				25.1mΩ ~ 50mΩ	±400					
				50.1mΩ ~ 0.2Ω	±200					
				0.21Ω ~ 1Ω	±100					
CS06 (1206)	1/4W, 1/3W-S	500V	±1% ±5%	10mΩ ~ 14.9mΩ	±700	3.10±0.15	1.55 $^{+0.15}_{-0.10}$	0.55±0.10	0.45±0.20	0.45±0.20
				15mΩ ~ 30mΩ	±400					
				30.1mΩ ~ 50mΩ	±300					
				50.1mΩ ~ 0.1Ω	±200					
				0.11Ω ~ 1Ω	±150					
CS07 (1210)	1/3W, 1/2W-S	500V	±1% ±5%	10mΩ ~ 14.9mΩ	±500	3.10±0.10	2.60±0.15	0.55±0.10	0.50±0.25	0.50±0.20
				15mΩ ~ 19.9mΩ	±400					
				20mΩ ~ 50mΩ	±300					
				50.1mΩ ~ 1Ω	±100					
CS10 (2010)	1/2W, 3/4W-S	500V	±1% ±5%	10mΩ ~ 14.9mΩ	±600	5.00±0.10	2.50±0.15	0.55±0.10	0.60±0.25	0.50±0.20
				15mΩ ~ 19.9mΩ	±500					
				20mΩ ~ 30mΩ	±300					
				30.1mΩ ~ 50mΩ	±200					
				50.1mΩ ~ 0.1Ω	±150					
				0.1Ω ~ 1Ω	±100					
CS12 (2512)	1W	500V	±1% ±5%	10mΩ ~ 14.9mΩ	±600	6.35±0.10	3.20±0.15	0.55±0.10	0.60±0.25	0.80±0.30
				15mΩ ~ 19.9mΩ	±400					
				20mΩ ~ 30mΩ	±300					
				30.1mΩ ~ 50mΩ	±200					
				50.1mΩ ~ 0.1Ω	±150					
				0.1Ω ~ 1Ω	±100					

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.
4.) CS07 size in 0.75W 100mΩ ~ 1Ω 100PPM/°C could be provided specially.
5.) CS12 size in 1W 50.1mΩ ~100mΩ 100PPM/°C could be provided specially.

Update : 18.08.2016

RoHS Compliant