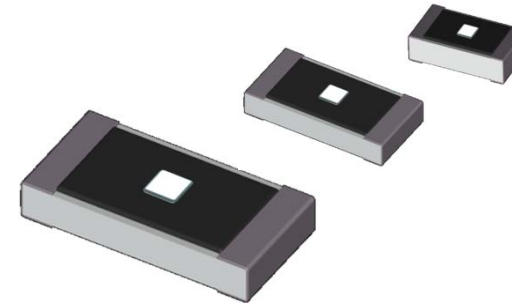


Anti-Sulfur Thick Film Chip Resistors

- 0603(0201), 1005(0402), 1608(0603), 2012(0805), 3216(1206),
3225(1210), 5025(2010), 6432(2512)

■ Features

- Small, thin and lightweight
- High reliability
- Stable in Sulfur Atmosphere (Anti-sulfur)
- Suitable size and package for surface mount assembly
- RoHS Compliant.



■ Part Number System

| RCS | |
|------|---------------------------|
| Type | |
| RCS | Anti-Sulfur chip resistor |

| 1005 | |
|------------------|------------------|
| Size : mm (inch) | |
| 0603 | 0.6×0.3mm (0201) |
| 1005 | 1.0×0.5mm (0402) |
| 1608 | 1.6×0.8mm (0603) |
| 2012 | 2.0×1.2mm (0805) |
| 3216 | 3.2×1.6mm (1206) |
| 3225 | 3.2×2.5mm (1210) |
| 5025 | 5.0×2.5mm (2010) |
| 6432 | 6.4×3.2mm (2512) |

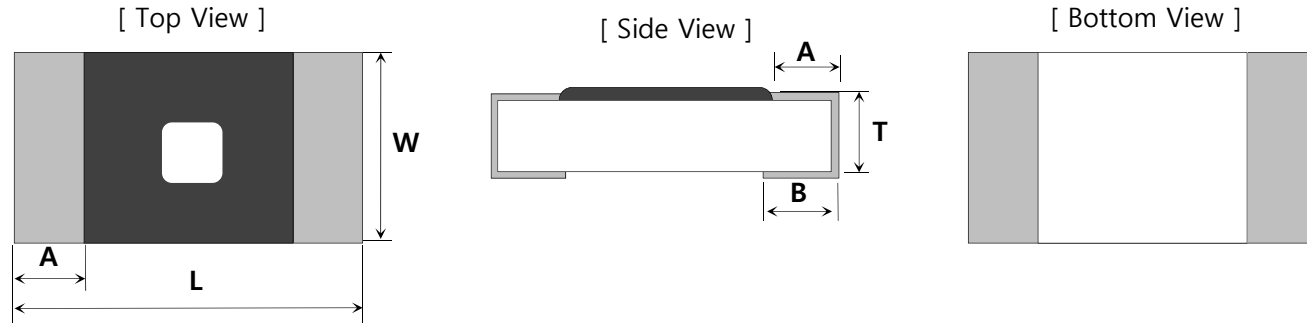
| J | |
|-----------|-----|
| Tolerance | |
| F | ±1% |
| G | ±2% |
| J | ±5% |

* Jumper : 'J'

| 150 | |
|---------------------------------------|--|
| Resistance Value | |
| - 3-digit coding System (E-24 series) | |
| - 4-digit coding System (E-96 series) | |
| - Jumper : '000' | |

| CS | |
|--------------|----------|
| Packing Type | |
| CS | 7" reel |
| ES | 10" reel |
| AS | 13" reel |

■ Structure and Dimensions



[Unit : mm]

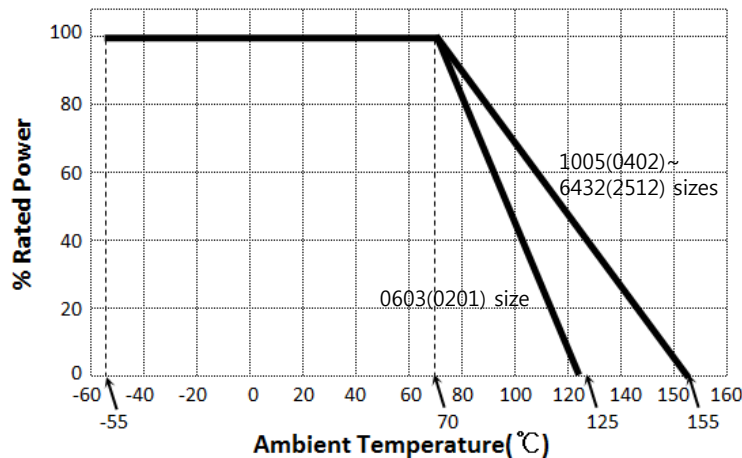
| Size(mil) | L | W | T | A | B | Unit Weight |
|---------------|-----------|-----------|-----------|-----------|-----------|-------------|
| RCS0603(0201) | 0.60±0.03 | 0.30±0.03 | 0.23±0.03 | 0.15±0.05 | 0.15±0.05 | 0.15mg |
| RCS1005(0402) | 1.00±0.05 | 0.50±0.05 | 0.35±0.05 | 0.20±0.10 | 0.25±0.10 | 0.6mg |
| RCS1608(0603) | 1.60±0.10 | 0.80±0.10 | 0.45±0.10 | 0.30±0.20 | 0.35±0.10 | 2.1mg |
| RCS2012(0805) | 2.00±0.20 | 1.25±0.15 | 0.55±0.10 | 0.40±0.20 | 0.35±0.20 | 4.9mg |
| RCS3216(1206) | 3.20±0.20 | 1.60±0.15 | 0.55±0.10 | 0.45±0.20 | 0.40±0.20 | 9.5mg |
| RCS3225(1210) | 3.20±0.20 | 2.55±0.20 | 0.55±0.10 | 0.45±0.20 | 0.40±0.20 | 16mg |
| RCS5025(2010) | 5.00±0.20 | 2.50±0.20 | 0.55±0.10 | 0.60±0.20 | 0.60±0.20 | 26mg |
| RCS6432(2512) | 6.30±0.20 | 3.20±0.20 | 0.55±0.10 | 0.60±0.20 | 0.60±0.20 | 41mg |

Applications and Ratings

| Type | Size (mil) | Rated Power [W] | Rated Voltage [V] | Max Working Voltage [V] | Tolerance [%] | Resistance Range [Ω] | T.C.R [ppm/°C] | Working Temp. [°C] | Moisture Level |
|---------|------------|-----------------|--|-------------------------|---------------------------|----------------------|---------------------------------|--------------------|----------------|
| RCS0603 | 0201 | 1/20 | $\sqrt{P \times R}$ P : Rated Power(W) R : Resistance(Ω) | 25 | ±1(F) ±5(J) | 1 ~ 10M | 1~9.9Ω : ±300 10~10MΩ : ±250 | -55~125 | Level 1 |
| RCS1005 | 0402 | 1/16 | | 50 | ±0.5(D) ±1(F) ±5(J) | 1 ~ 10M | 1~9.9Ω : ±300 10~10MΩ : ±100 | -55 ~ 155 | |
| RCS1608 | 0603 | 1/10 | | 50 | | | | | |
| RCS2012 | 0805 | 1/8 | | 150 | | | | | |
| RCS3216 | 1206 | 1/4 | | 200 | | | | | |
| RCS3225 | 1210 | 1/3 | | 200 | | | | | |
| RCS5025 | 2010 | 2/3 | | 200 | | | | | |
| RCS6432 | 2512 | 1 | | 200 | | | | | |

• Please contact our sales representatives or engineers for other specifications

Power Derating Curve



Jumper Ratings

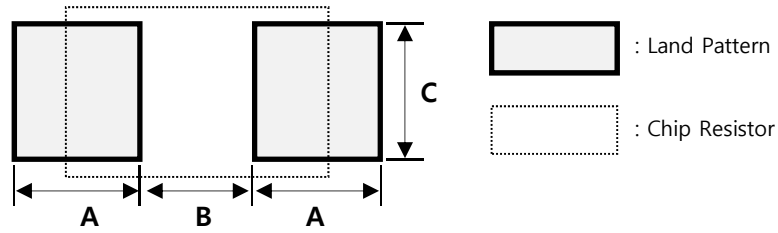
| Type | Rated Current (A) | Max Overload Current (A) |
|------------------------------|-------------------|--------------------------|
| 0603 | 0.5 | 1 |
| 1005, 1608 | 1 | 2 |
| 2012, 3216, 3225, 5025, 6432 | 2 | 4 |

Rated Voltage

$$V = \sqrt{P \times R}$$

E : Rated Voltage (V)
 P : Rated Power (W)
 R : Resistance Value (Ω)

Standard Soldering Pad Dimensions



[Unit : mm]

| Size(mil) | Reflow Soldering | | | |
|---------------|------------------|------|--------|------|
| | A | B | 2A + B | C |
| RCS0603(0201) | 0.37 | 0.28 | 1.02 | 0.29 |
| RCS1005(0402) | 0.60 | 0.50 | 1.70 | 0.50 |
| RCS1608(0603) | 0.80 | 0.80 | 2.40 | 0.80 |
| RCS2012(0805) | 0.90 | 1.40 | 3.20 | 1.20 |
| RCS3216(1206) | 1.30 | 1.80 | 4.40 | 1.50 |
| RCS3225(1210) | 1.30 | 1.80 | 4.40 | 2.40 |
| RCS5025(2010) | 1.40 | 3.30 | 6.10 | 2.40 |
| RCS6432(2512) | 1.40 | 4.60 | 7.40 | 3.00 |

■ Performance Characteristics

| ITEM | Requirements Specification | Test Conditions (JIS C 5201-1) |
|---------------------------|----------------------------------|---|
| Resistance | Within the specified tolerance | JIS C 5201-1 4.5 |
| Temp. Characteristic | Within the specified T.C.R | JIS C 5201-1 4.8 +20°C → -55°C / +20°C → +125°C |
| Short time Overload | $\Delta R < \pm 1\% + 0.1\Omega$ | JIS C 5201-1 4.13 Rated Voltage×2.5, 5sec |
| Solderability | Immersed over 95% | JIS C 5201-1 4.17 Rosin Ethanol (25%WT) 245±5/-0°C, 2±0.5 sec |
| Resistance to Solder Heat | $\Delta R < \pm 1\% + 0.1\Omega$ | JIS C 5201-1 4.18 260±5°C, 10±1 sec |
| Temp. Cycle | $\Delta R < \pm 1\% + 0.1\Omega$ | JIS C 5201-1 4.19 -55°C ↔ +125°C, 100 cycle |
| Moisture Resistance | $\Delta R < \pm 3\% + 0.1\Omega$ | JIS C 5201-1 4.24 40±2°C, 90~95%RH, 1,000 ⁺⁴⁸ hours |
| Load Life | $\Delta R < \pm 3\% + 0.1\Omega$ | JIS C 5201-1 4.25 Rated Voltage, 70±2°C, 1,000 ⁺⁴⁸ hours 90mins ON, 30mins OFF |
| High Temp. Exposure | $\Delta R < \pm 3\% + 0.1\Omega$ | JIS C 5201-1 4.25.3 155±2°C, 1,000 ⁺⁴⁸ hours |
| Flower of Sulfur (FOS) | $\Delta R < \pm 1\% + 0.1\Omega$ | 105°C, FoS, 720 ⁺² hours |

※ The reliability test condition can be replaced by the corresponding accelerated test condition.

 Product specifications included in the specifications are effective as of March 01, 2015.

Please be advised that they are standard product specifications for reference only.

We may change, modify or discontinue the product specifications without notice at any time.

So, you need to approve the product specifications before placing an order.

Should you have any question regarding the product specifications,

please contact our sales personnel or application engineers.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Samsung Electro-Mechanics\(三星电机\)](#)