



THE DATASHEET OF RC1005F154CS

Thick Film General Chip Resistors



- 0402(01005), 0603(0201), 1005(0402), 1608(0603), 2012(0805), 3216(1206), 3225(1210), 5025(2010), 6432(2512)

■ Features

- Small, thin and lightweight
- High reliability
- Applicable Both flow and reflow soldering.
- Suitable size and package for surface mount assembly
- RoHS Compliant.

■ Part Number System

RC	
Type (Series)	
RC	General purpose chip resistor

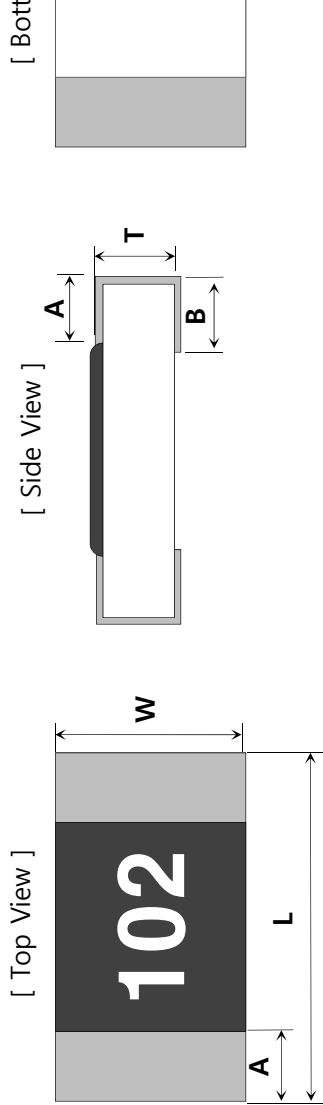
0603	
Size : mm (inch)	
0402	0.4×0.2mm (01005)
0603	0.6×0.3mm (0201)
1005	1.0×0.5mm (0402)
1608	1.6×0.8mm (0603)
2012	2.0×1.2mm (0805)
3216	3.2×1.6mm (1206)
3225	3.2×2.5mm (1210)
5025	5.0×2.5mm (2010)
6432	6.4×3.2mm (2512)

F	
Tolerance	
D	±0.5%
F	±1.0%
G	±2.0%
J	±5.0%

* Jumper : 'J'

2552	Resistance Value
- 3-digit code System (E-24 series)	
- 4-digit code System (E-96 series)	
- Jumper : '000'	
- 2552 : 25.5KΩ	

■ Structure and Dimensions



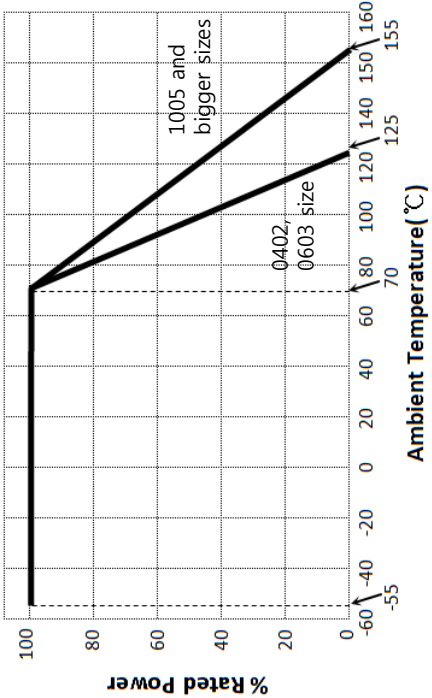
Size(mil)	L	W	T	A	
RC0402(01005)	0.40±0.02	0.20±0.02	0.13±0.02	0.10±0.03	0.
RC0603(0201)	0.60±0.03	0.30±0.03	0.23±0.03	0.10±0.05	0.
RC1005(0402)	1.00±0.05	0.50±0.05	0.35±0.05	0.20±0.10	0.
RC1608(0603)	1.60±0.10	0.80±0.10	0.45±0.10	0.30±0.20	0.
RC2012(0805)	2.00±0.20	1.25±0.15	0.55±0.10	0.40±0.20	0.
RC3216(1206)	3.20±0.20	1.60±0.15	0.55±0.10	0.45±0.20	0.
RC3225(1210)	3.20±0.20	2.55±0.20	0.55±0.10	0.45±0.20	0.
RC5025(2010)	5.00±0.20	2.50±0.20	0.55±0.10	0.60±0.20	0.
RC6432(2512)	6.30±0.20	3.20±0.20	0.55±0.10	0.60±0.20	0.

Applications and Ratings

Type	Size (mil)	Rated Power [W]	Rated Voltage [V]	Max Working Voltage [V]	Tolerance [%]	Resistance Range [Ω]	T. C. [ppm/°C]
RC0402	01005	1/32	$\sqrt{P \times R}$ P : Rated Power(W) R : Resistance(Ω)	15	±1(F) ±5(J)	1 ~ 1M	1~9.9Ω : 10~1MΩ
RC0603	0201	1/20		25		1 ~ 10M	1~9.9Ω : 10~10MΩ
RC1005	0402	1/16		50	±0.5(D) ±1(F) ±5(J)	1 ~ 10M	1~9.9Ω : 10~10MΩ
RC1608	0603	1/10		50			
RC2012	0805	1/8		150			
RC3216	1206	1/4		200			
RC3225	1210	1/3		200			
RC5025	2010	2/3		200			
RC6432	2512	1		200			

• Please contact our sales representatives or engineers for other specifications

Power Derating Curve



Jumper Ratings

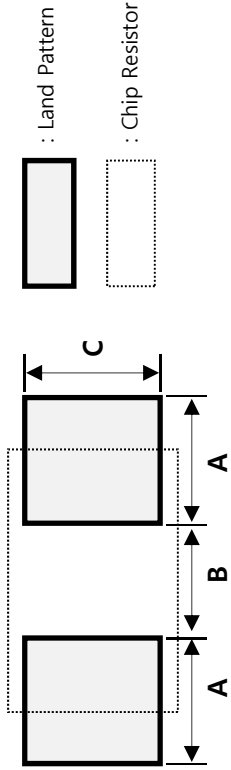
Type	Rated Current [A]	Max Over Current
0402, 0603	0.5	1
1005, 1608	1	2
2012 and bigger sizes	2	4

Rated Voltage

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

E : Rated Voltage
P : Rated Power
R : Resistance

■ Standard Soldering Pad Dimensions



Size(mil)	Reflow Soldering		
	A	B	2A + B
RC0402(01005)	017	0.20	0.54
RC0603(0201)	0.37	0.28	1.02
RC1005(0402)	0.60	0.50	1.70
RC1608(0603)	0.80	0.80	2.40
RC2012(0805)	0.90	1.40	3.20
RC3216(1206)	1.30	1.80	4.40
RC3225(1210)	1.30	1.80	4.40
RC5025(2010)	1.40	3.30	6.10
RC6432(2512)	1.40	4.60	7.40

■ Performance Characteristics

ITEM	Requirements Specification	Test (JIS)
Resistance	Within the specified tolerance	JIS C 5201-1 4.5
Temperature Characteristic	Within the specified T.C.R	JIS C 5201-1 4.8 +20°C → -55°C / +20
Short time Overload	$\Delta R < \pm 1\% + 0.1\Omega$	JIS C 5201-1 4.13 Rated Voltage×2.5, 4
Solderability	Immersed over 95%	JIS C 5201-1 4.17 Rosin Ethanol (25%V 245+5/-0°C, 2±0.5 se
Resistance to Solder Heat	$\Delta R < \pm 1\% + 0.1\Omega$	JIS C 5201-1 4.18 260±5°C, 10±1 sec
Temperature Cycle	$\Delta R < \pm 1\% + 0.1\Omega$	JIS C 5201-1 4.19 -55°C ↔ +125°C, 10
Moisture Resistance	$\Delta R < \pm 3\% + 0.1\Omega$	JIS C 5201-1 4.24 40±2°C, 90~95%RH, 90mins ON, 30mins
Load Life	$\Delta R < \pm 3\% + 0.1\Omega$	JIS C 5201-1 4.25 Rated Voltage, 70±2 90mins ON, 30mins C
High Temp. Exposure	$\Delta R < \pm 3\% + 0.1\Omega$	JIS C 5201-1 4.25.3 155±2°C, 1,000 ⁺⁴⁸ ho

※ 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.

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