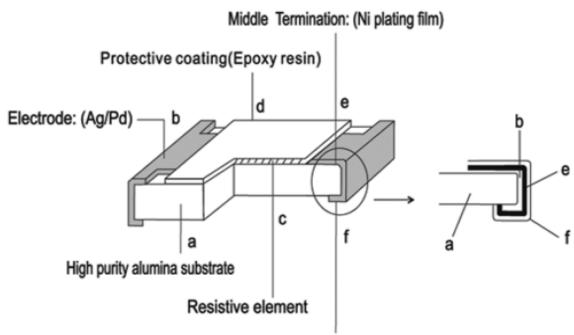


# SMD THICK FILM CHIP RESISTORS

### CONSTRUCTION



Outer Termination: (Sn plating film)

### APPLICATION

Entertainment: stereo, TV tuners, tape recorder

Appliance: Air conditioner, refrigerator

Computer & relative products: Mainboard, PDA

Communication equipment: cell phone, Fax machine

Power equipment: power supply, illumination equipment

Measuring instrument: Electric meter, Navigation equipment

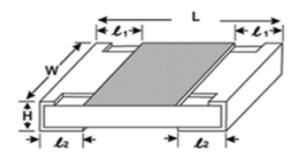
### **FEATURES**

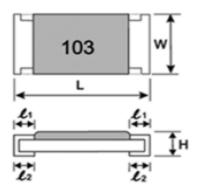
- Small size and light weight
- Reduction of assembly costs and matching with placement machines.
- · Reliability, High quality and Fast delivery.



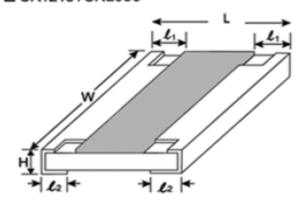
# **SMD THICK FILM CHIP RESISTORS**

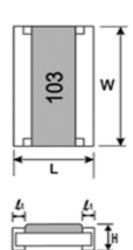
CR0201 / CR0402 / CR0603 / CR0805 / CR1206 / CR1210 / CR1812 / CR2010 / CR2512





CR1218 / CR2030





## **DIMENSION**

Unit: mm

TYPE	L	W	Н	4	l <sub>2</sub>
CR0201	$0.60 \pm 0.03$	$0.30 \pm 0.03$	0.23±0.05	$0.15 \pm 0.05$	0.15 ± 0.05
CR0402	$1.00 \pm 0.10$	$0.50 \pm 0.05$	$0.30 \pm 0.05$	$0.20 \pm 0.10$	$0.20 \pm 0.10$
CR0603	1.60±0.20	$0.80 \pm 0.15$	0.40 ± 0.10	$0.30 \pm 0.20$	0.30 ± 0.15
CR0805	$2.00 \pm 0.20$	1.25 ± 0.15	0.50 ± 0.15	$0.35 \pm 0.15$	0.35 ± 0.15
CR1206	$3.20 \pm 0.20$	$1.60 \pm 0.20$	0.55 ± 0.15	0.45 ± 0.20	0.45 ± 0.20
CR1210	3.20 ± 0.20	$2.50 \pm 0.20$	0.55 ± 0.15	$0.50 \pm 0.20$	0.50 ± 0.20
CR1812	4.50 ± 0.10	$3.00 \pm 0.10$	0.55 ± 0.05	$0.55 \pm 0.10$	0.80 ± 0.10
CR2010	5.00 ± 0.20	$2.50 \pm 0.20$	0.55 ± 0.10	$0.60 \pm 0.20$	$0.60 \pm 0.20$
CR1218	3.10 ± 0.10	$4.60 \pm 0.10$	$0.55 \pm 0.05$	$0.45 \pm 0.10$	$0.40 \pm 0.10$
CR2512	6.30 ± 0.20	$3.20 \pm 0.20$	$0.55 \pm 0.10$	$0.60 \pm 0.20$	$0.60 \pm 0.20$
CR2030	5.10 ± 0.10	$7.60 \pm 0.10$	$0.60 \pm 0.05$	$0.80 \pm 0.10$	$0.70 \pm 0.10$



## RATINGS

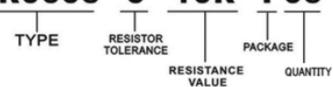
TYPE Por	Rating	Max	Max Overload Voltage	T.C.R (PPM/C)	Resistance Range				Operating	
	Power at 70°C	Working Voltage			B(±0.1%) D(±0.5%)	F(±1%) below	G(±2%)	J(±5%) K(±10%)	Temperature Range	
CR0201	0.05W	25V	50V	+200~-200				10Ω~IMΩ		
		50V		+500~-200		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
CR0402 ().()	0.063W			+300~-300		10Ω~990Ω	10Ω~990Ω	10Ω~990Ω		
	0.000			+200~-200	10Ω~IMΩ	1KΩ~10MΩ	1KΩ~10MΩ	1KΩ~10MΩ		
				+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
CR0603	0.1W	50V	100V	+200~-200			10 Ω ~10MΩ	10 Ω ~10MΩ		
				+100~-100	10Ω~IMΩ	10 Ω ~10MΩ				
				+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
CR0805	0.125W	1500	300V	+200~-200			10Ω~10MΩ	10 Ω ~10MΩ	-55℃ +125℃	
				+100~-100	10Ω~IMΩ	10Ω~10MΩ				
		200V	400V	+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
CR1206	0.25W			+200~-200			10 Ω ~10MΩ	10 Ω ~10MΩ		
				+100~-100	10Ω~IMΩ	10 Ω ~10MΩ				
	0.333W	200V	400V	+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
CR1210				+200~-200			10Ω~10MΩ	10 Ω ~10MΩ		
				+100~-100	10Ω~IMΩ	10Ω~10MΩ				
CR1812 (		SW 200V	400V	+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
	0.5W			+200~-200			10 Ω ~10MΩ	10 Ω ~10MΩ		
				+100~-100	10Ω~IMΩ	10Ω~10MΩ				
CR2010	0.5W	5W 200V	V 400V	+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
				+200~-200			10 Ω ~10MΩ	10 Ω ~10MΩ		
				+100~-100	10Ω~IMΩ	10Ω~10MΩ				
	1W	200V			+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω	
CR1218			400V	+200~-200			10Ω~10MΩ	10Ω~10MΩ		
				+100~-100	10Ω~IMΩ	10Ω~10MΩ			1	
CR2512	1W		400V	+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
		200V		+200~-200			10 Ω ~10MΩ	10 Ω ~10MΩ	4	
				+100~-100	10Ω~IMΩ	10Ω~10MΩ				
CR2030		200V	00V 400V	+400~-400		1Ω~9.9Ω	1Ω~9.9Ω	1Ω~9.9Ω		
	2W			+200~-200			10 Ω ~10MΩ	10 Ω ~10MΩ	-	
				+100~-100	10Ω~IMΩ	10Ω~10MΩ				

TYPE	CR0201	CR0402	CR0603	CR0805	CR1206	CR1210	CR1812	CR2010	CR1218	CR2512	CR2030
Jumper Resistance Value		50mΩ Max									
Rated Power at 70°C	0.05W	0.063W	0.1W	0.125W	0.25W	0.333W	0.5W	0.5W	1W	1W	2 W
Jumper Rated Current	0.5 Δ 1Δ			2Δ							
Operating Temperature Range	-55℃~+125℃										



## PARTS NUMBER EXPLANATION

## EXAMPLE: CR0603 J 10R P05



Туре					
0603(0201)	CR0201				
1005(0402)	CR0402				
1608(0603)	CR0603				
2012(0805)	CR0805				
3216(1206)	CR1206				
3225(1210)	CR1210				
4631(1812)	CR1812				
5025(2010)	CR2010				
3248(1218)	CR1218				
6432(2512)	CR 2512				
5176(2030)	CR2030				
0402 2 elements	CRA022R				
0402 2 elements	CRA022C				
0402 4 elements	CRA024R				
0402 4 elements	CRA024C				
0402 8 elements	CRN028R				
0603 2 elements	CRA032R				
0603 4 elements	CRA034R				
0603 4 elements	CRA034C				
1206 4 elements	CRA064R				

Resistor Tolerance				
В	±0.1%	J	±5%	
С	±0.25%	K	±10%	
D	±0.5%	L	±15%	
F	±1%	М	±20%	
G	±2%	N	±30%	

Package				
P · Q Paper Taping				
E	<b>Embossed Taping</b>			
D	Packed in a Bag			

QUANTITY				
01	1000PCS			
02	2000PCS			
04	4000PCS			
05	5000PCS			
10	10000PCS			
20	20000PCS			
40	40000PCS			
50	50000PCS			

EXAPLE: CRA034RJ10RP05 CRA034CJ10RP05

 $\frac{CRA034R}{A} \frac{J}{B} \frac{10R}{C} \frac{P}{D} \frac{05}{E}$ 

CRA034C J 10R P 05 A B C D E F A. Type(SCRA034R 0603 ARRAY)

B. Type(R=Convex C=Concave)

C. Tolerance(F: ± 1% J: ± 5% k:± 10%)

D. Resistance Value(E - 24 E - 96 Series) 10R

E. Packing(P: Paper Tape Reel)

F. QUANTITY (05: 5000pcs)