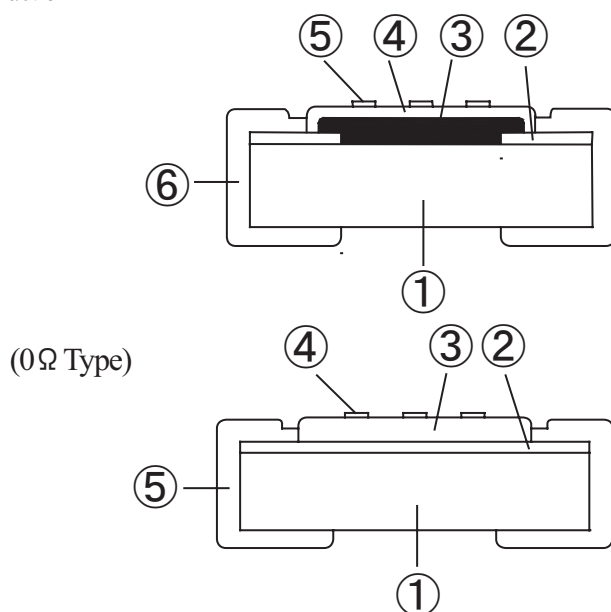


*1 Article	CR04 (CR1/32)	CR06 (CR1/20)	CR10 (CR1/16S)	CR16 (CR1/16)	CR20 (CR1/10)	CR32 (CR1/8)	CR35 (CR1/4)	CR50 (CR1/2)	CR64 (CR1)
Size Code inch	01005	0201	0402	0603	0805	1206	1210	2010	2512
Size Code mm	0402	0603	1005	1608	2012	3216	3225	5025	6432

*1 ():Conventional Type No.

Construction



Symbol	Material List
①	Alumina substrate
②	Conductor
③	Resistive film
④	Over coat
⑤	Marking *2
⑥	Side termination

Symbol	Material List
①	Alumina substrate
②	Conductor
③	Over coat
④	Marking*2
⑤	Side termination

*2 No marking on CR04, CR06, CR10, CR16 (E-96 Series)

Type Designation

*1	CR16 (CR1/16)	102	J	V
Article *1	Resistance	Tolerance (%)	Packaging	
CR04(CR1/32)	3 or 4 digit (Resistance) (Marking)	Symbol Tolerance	Symbol Packaging	
CR06(CR1/20)	0Ω → 000	D ± 0.5	B Bulk	
CR10(CR1/16S)	4.7Ω → 4R7	F ± 1.0	V Paper taping	
CR16(CR1/16)	1kΩ → 102	G ± 2.0	E Embossed taping	
CR20(CR1/10)	1.02kΩ → 1021	J ± 5.0	C Bulk case	
CR32(CR1/8)		K ± 10.0		
CR35(CR1/4)				
CR50(CR1/2)				
CR64(CR 1)				

0Ω type is no marking



Rating

*1 Article	Rated Wattage (%)	Tolerance (%)		Resistance Range E-24, E-96 Series Standard (%)	T.C.R. (Ω)	Max. Working Voltage (%)	Max. Overload Voltage (%)	0Ω Type	
								Rated Current (A)	Resistance (Ω)
CR04 (CR1/32)	0.03	F	±1	10 ~ 1M	±250	15	30	0.3	Max. 50mΩ
		G	±2	10 ~ 1M	±250				
		J	±5	10 ~ 1M	±250				
CR06 (CR1/20)	0.050	F	±1	10 ~ 1M	±200	25	50	0.5	
		G	±2	10 ~ 1M	±200				
		J	±5	10 ~ 10M 1 ~ 9.1	±200 ±400				
CR10 (CR1/16S)	0.063	D	±0.5	100 ~ 1M	±50	50	100	1.0	
		D	±0.5	10 ~ 91	±100				
		F	±1	10 ~ 1M	±100				
		G	±2	10 ~ 1M	±200				
		J	±5	10 ~ 10M 1 ~ 9.1	±200 ±300				
CR16 (CR1/16)	0.063	D	±0.5	100 ~ 100k	±50	50	100	1.0	
	0.100	D	±0.5	100 ~ 976	±100				
		F	±1	10 ~ 1M	±100				
		G	±2	10 ~ 1M	±200				
		J	±5	1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M	-100 ~ +600 ±200 ±300				
			CR20 (CR1/10)	0.100	D				±0.5
0.125	F	±1		10 ~ 1M	±100				
	G	±2		10 ~ 1M	±200				
	J	±5		1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M	-100 ~ +600 ±200 ±300				
		K		±10	11M ~ 22M	±300			
CR32 (CR1/8)	0.125	D	±0.5	100 ~ 100k	±100	200	400	2.0	
	0.250	F	±1	10 ~ 1M	±100				
		G	±2	10 ~ 1M	±200				
		J	±5	1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M	-100 ~ +600 ±200 ±300				
			K	±10	11M ~ 22M				±300
		CR35 (CR1/4)	0.250	F	±1				10 ~ 1M
G	±2			10 ~ 1M	±200				
J	±5			1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M	-100 ~ +600 ±200 ±300				
CR50 (CR1/2)	0.500	G	±2	10 ~ 1M	±300	200	400	2.0	
		J	±5	1 ~ 1M	±500				
CR64 (CR1)	1.000	J	±5	1 ~ 9.1 10 ~ 1M	±500 ±300	200	400	2.0	

*1 ():Conventional Type No.

★Operating temperature range : -55 °C ~ +125 °C

★E-96 series resistance values are available for D class F class.

★Please apply the rated voltage or lower.

Rated voltage is calculated by $E = \sqrt{PR}$

E = Rated Voltage (V)

P = Rated Power (W)

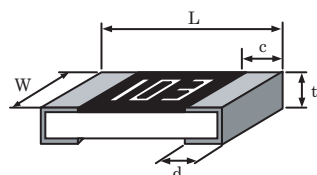
R = Resistance (Ω)

★In case rated voltage calculation is excess of maximum working voltage, maximum or lower voltage be applied.



Flat Chip Resistors

Dimension



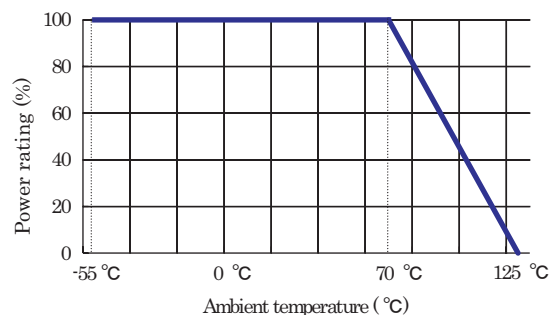
(mm)

Article *1	L	W	c	d	t
CR04 (CR1/32)	0.40 ± 0.02	0.20 ± 0.02	0.10 ± 0.03	0.10 ± 0.03	0.12 ± 0.02
CR06 (CR1/20)	0.60 ± 0.03	0.30 ± 0.03	0.12 ± 0.05	0.15 ± 0.05	0.23 ± 0.03
CR10 (CR1/16S) LCR10 (LCR1/16S)	1.00 ± 0.05	0.50 ± 0.05	0.20 ± 0.10	0.25 ± 0.10	0.35 ± 0.05
CR16 (CR1/16), LCR16 (LCR1/16) FCR16 (FCR1/16)	1.60 ± 0.15	0.80 ^{+0.20} _{-0.10}	0.25 ± 0.20	0.25 ± 0.20	0.50 ^{+0.15} _{-0.05}
CR20 (CR1/10), LCR20 (LCR1/10) UCR20 (UCR1/10), FCR20 (FCR1/10)	2.00 ^{+0.20} _{-0.10}	1.25 ^{+0.20} _{-0.10}	0.40 ± 0.20	0.40 ± 0.20	0.50 ^{+0.15} _{-0.05}
CR32 (CR1/8), LCR32 (LCR1/8) ECR32, FCR32 (FCR1/8)	3.20 ^{+0.10} _{-0.15}	1.60 ^{+0.10} _{-0.15}	0.50 ± 0.20	0.50 ± 0.20	0.55 ^{+0.15} _{-0.05}
CR35 (CR1/4), LCR35 (LCR1/4) FCR35 (FCR1/4)	3.20 ^{+0.10} _{-0.15}	2.60 ^{+0.10} _{-0.15}	0.50 ± 0.20	0.50 ± 0.20	0.55 ^{+0.15} _{-0.05}
CR50 (CR1/2), LCR50 (LCR1/2) ECR50, FCR50 (FCR1/2)	5.00 ± 0.20	2.50 ± 0.20	0.60 ± 0.25	0.60 ± 0.25	0.56 ± 0.15
CR64 (CR1) LCR64 (LCR1)	6.30 ± 0.20	3.20 ± 0.20	0.60 ± 0.25	0.60 ± 0.25	0.56 ± 0.15

*1 (): Conventional Type No.

Power rating

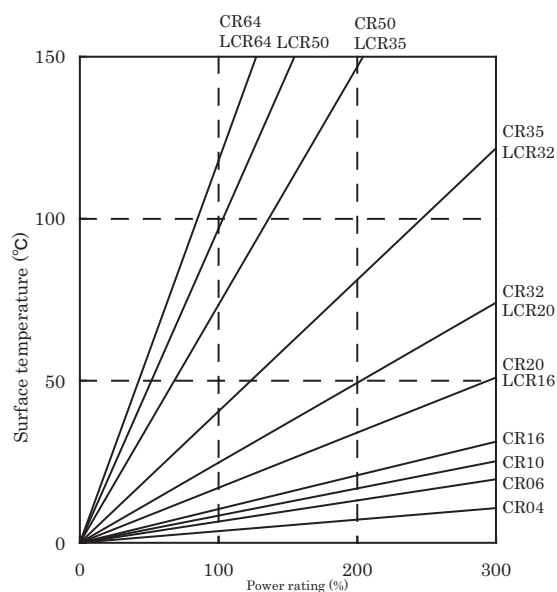
For resistors operated in ambient temperature above 70 °C, power rating must be derated in accordance with the derating curve.



Surface temperature

Surface temperature rise is shown in this figure.

Please notice that CR50 and CR64 have high temperature rise when Loaded 100%.



Packaging

Refer page 12