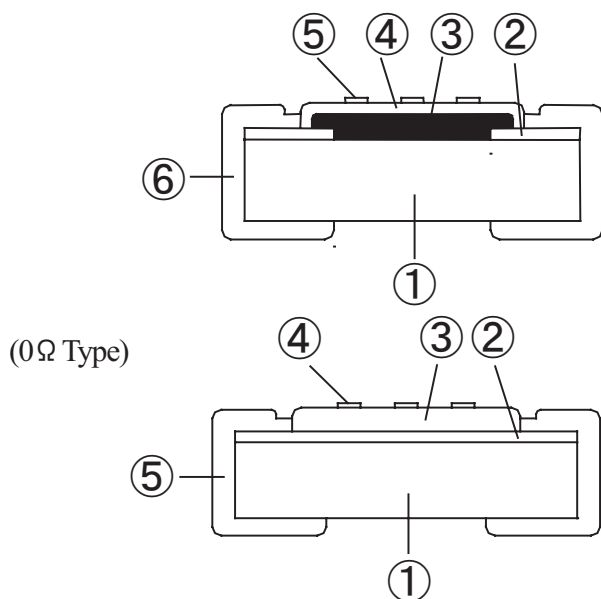


*1 Article	CR06 (CR1/20)	CR10 (CR1/16S)	CR16 (CR1/16)	CR20 (CR1/10)	CR32 (CR1/8)	CR35 (CR1/4)	CR50 (CR1/2)	CR64 (CR1)
Size Code inch	0201	0402	0603	0805	1206	1210	2010	2512
Size Code mm	0603	1005	1608	2012	3216	3225	5025	6432

*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 CR06, CR10, CR16 (E-96 Series)

Type Designation

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

0Ω type is no marking



Flat Chip Resistors

Rating

*1 Article	Rated Wattage (%)	Tolerance		Resistance Range	T.C.R.	Max. Working Voltage (%)	Max. Overload Voltage (%)	0 Ω Type	
		(%)		E-24, E-96 Series Standard (%)	(Ω)			Rated Current (A)	Resistance (Ω)
CR06 (CR1/20)	0.050	F	± 1	10 ~ 1M	± 250	25	50	0.5	Max. 50m Ω
		G	± 2	10 ~ 1M	± 250				
		J	± 5	10 ~ 1M	± 250				
CR10 (CR1/16S)	0.063	D	± 0.5	100 ~ 100k	± 50	50	100	1.0	
		F	± 1	10 ~ 1M	± 100				
		G	± 2	10 ~ 1M	± 200				
CR16 (CR1/16)	0.100	J	± 5	4.7 ~ 2.2M	± 300	50	100	1.0	
		D	± 0.5	100 ~ 100k	± 50				
		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)	0.125	D	± 0.5	100 ~ 100k	± 100	150	200	1.5	
		F	± 1	10 ~ 1M	± 100				
		G	± 2	10 ~ 1M	± 200				
		J	± 5	1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M 11M ~ 22M	-100 ~ + 600 ± 200 ± 300 ± 300				
		K	± 10	11M ~ 22M	± 300				
		D	± 0.5	100 ~ 100k	± 100				
CR32 (CR1/8)	0.250	F	± 1	10 ~ 1M	± 100	200	400	2.0	
		G	± 2	10 ~ 1M	± 200				
		J	± 5	1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M 11M ~ 22M	-100 ~ + 600 ± 200 ± 300 ± 300				
		K	± 10	11M ~ 22M	± 300				
		D	± 0.5	100 ~ 100k	± 100				
		F	± 1	10 ~ 1M	± 100				
CR35 (CR1/4)	0.250	G	± 2	10 ~ 1M	± 200	200	400	2.0	
		J	± 5	1 ~ 4.3 4.7 ~ 3.3M 3.6M ~ 10M	-100 ~ + 600 ± 200 ± 300				
		G	± 2	10 ~ 1M	± 200				
CR50 (CR1/2)	0.500	J	± 5	1 ~ 1M	± 500	200	400	2.0	
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)

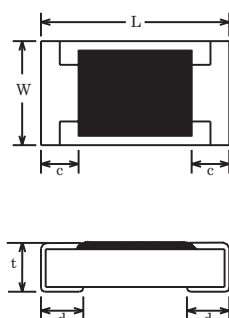
R = Resistance (Ω)

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



Flat Chip Resistors

■ Dimension

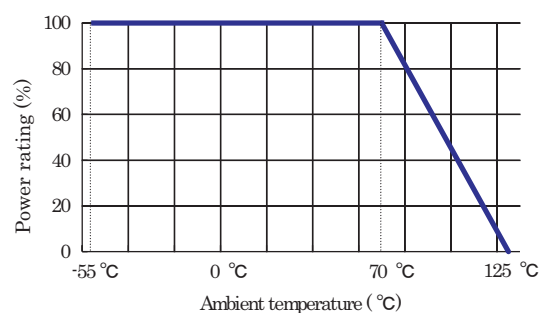


Article *1	L	W	c	d	t
CR06 (CR1/20)	0.60 ± 0.03	0.30 ± 0.03	0.12 ± 0.05	0.15 ± 0.05	0.23 ± 0.03
CR10 (CR1/16S) LCR10 (LCR1/16S)	1.00 ± 0.05	0.50 ± 0.05	0.20 ± 0.10	0.25 ± 0.10	0.35 ± 0.05
CR16 (CR1/16), LCR16 (LCR1/16) FCR16 (FCR1/16)	1.60 ± 0.15	0.80 ^{+0.20} _{-0.10}	0.25 ± 0.20	0.25 ± 0.20	0.50 ^{+0.15} _{-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

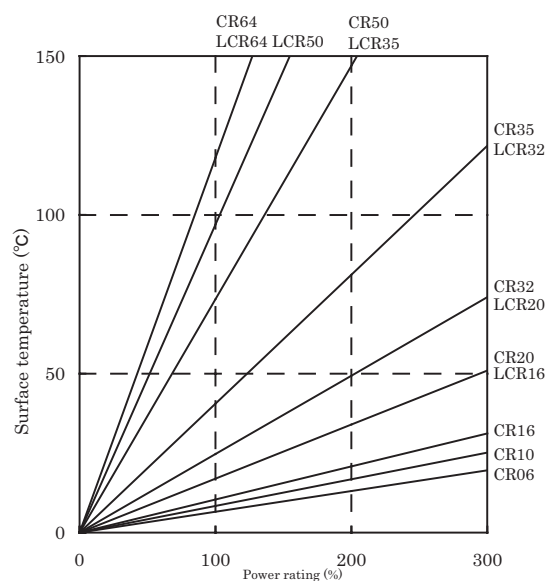
For resistors operated in ambient temperature above 70 °C,
power rating must be derated in accordance with the derating curve.



■ 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