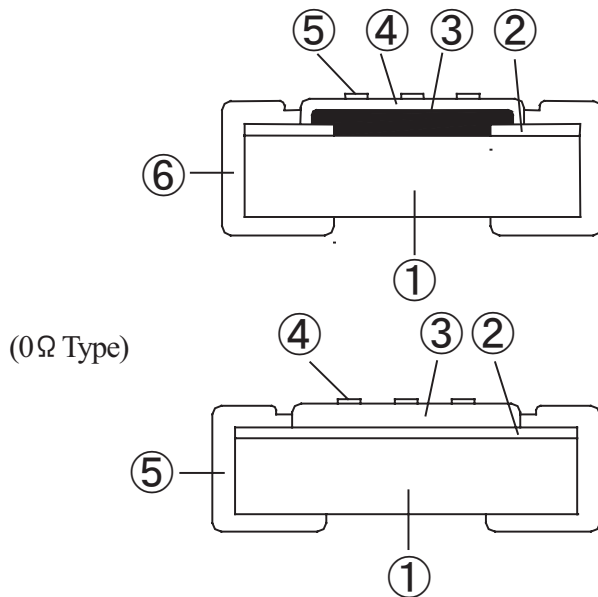


*1 Article	CR06 (CR1/20)	CR10 (CR1/16S)	CR16 (CR1/16)	CR20 (CR1/10)	CR32 (CR1/8)	CR35 (CR1/4)	CR50 (CR1/2)	CR64 (CR1)
Size Code inch	0201	0402	0603	0805	1206	1210	2010	2512
Size Code mm	0603	1005	1608	2012	3216	3225	5025	6432

*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)				0Ω type is no marking					
CR64(CR1)									



Rating

*1 Article	Rated Wattage (%)	Tolerance		Resistance Range E-24, E-96 Series Standard (%)	T.C.R. (Ω)	Max. Working Voltage (%)	Max. Overload Voltage (%)	0 Ω Type	
			(%)					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		
		F	± 1	10 ~ 1M	± 100				
		G	± 2	10 ~ 1M	± 200				
CR16 (CR1/16)	0.100	J	± 5	4.7 ~ 2.2M	± 300	50	100		
		D	± 0.5	100 ~ 100k	± 50				
		D	± 0.5	100 ~ 976	± 100				
		F	± 1	10 ~ 1M	± 100				
		G	± 2	10 ~ 1M	± 200				
CR20 (CR1/10)	0.125	J	± 5	1 ~ 4.3	-100 ~ +600	150	200		
		D	± 0.5	100 ~ 100k	± 100				
		F	± 1	10 ~ 1M	± 100				
		G	± 2	10 ~ 1M	± 200				
		K	± 10	11M ~ 22M	± 300				
		J	± 5	4.7 ~ 3.3M	± 200				
CR32 (CR1/8)	0.250	K	± 10	3.6M ~ 10M	± 300	200	400		
		D	± 0.5	100 ~ 100k	± 100				
		F	± 1	10 ~ 1M	± 100				
		G	± 2	10 ~ 1M	± 200				
		J	± 5	1 ~ 4.3	-100 ~ +600				
CR35 (CR1/4)	0.250	J	± 5	4.7 ~ 3.3M	± 200	200	400		
		G	± 2	10 ~ 1M	± 200				
		F	± 1	10 ~ 1M	± 100				
		J	± 5	1 ~ 4.3	-100 ~ +600				
CR50 (CR1/2)	0.500	J	± 5	1 ~ 1M	± 500	200	400		
		G	± 2	10 ~ 1M	± 300				
CR64 (CR1)	1.000	J	± 5	1 ~ 9.1	± 500	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 $E = \sqrt{PR}$

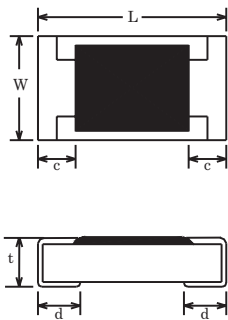
E = Rated Voltage (V)

P = Rated Power (W)

R = Resistance (Ω)

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

Dimension

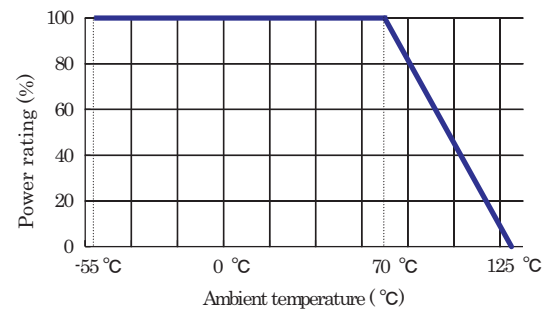


Article *1	L	W	c	d	t
CR06 (CR1/20)	0.60 ± 0.03	0.30 ± 0.03	0.12 ± 0.05	0.15 ± 0.05	0.23 ± 0.03
CR10 (CR1/16S) LCR10 (LCR1/16S)	1.00 ± 0.05	0.50 ± 0.05	0.20 ± 0.10	0.25 ± 0.10	0.35 ± 0.05
CR16 (CR1/16), LCR16 (LCR1/16) FCR16 (FCR1/16)	1.60 ± 0.15	0.80 ^{+0.20} _{-0.10}	0.25 ± 0.20	0.25 ± 0.20	0.50 ^{+0.15}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

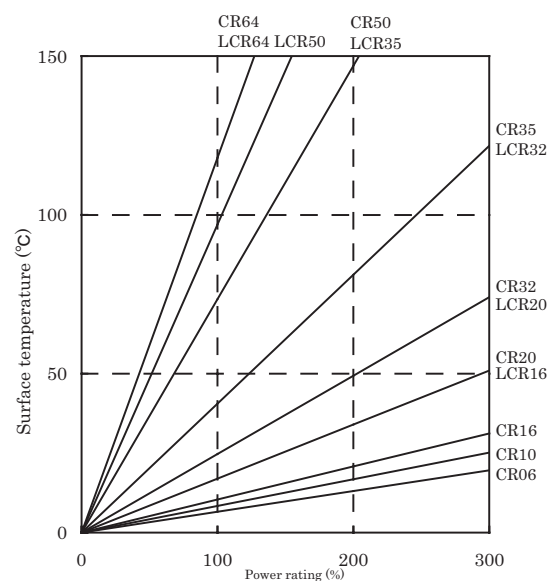
Power rating

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