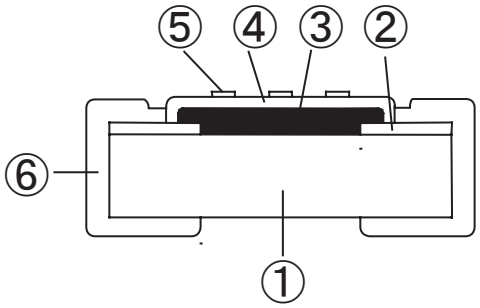
*1 Model No.	CR04 (CR1/32)	CR06 (CR1/20)	CR10 (CR1/16S)	CR16 (CR1/16)	CR20 (CR1/10)	CR32 (CR1/8)	CR35 (CR1/4)	CR50 (CR1/2)	CR64 (CR1)
Size Code inch	01005	0201	0402	0603	0805	1206	1210	2010	2512
Size Code mm	0402	0603	1005	1608	2012	3216	3225	5025	6432

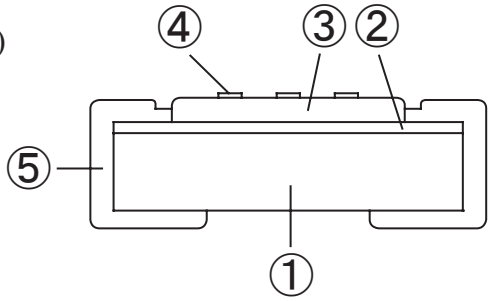
*1 ( ):Conventional Model No.

■Construction



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

(0Ω Type)



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)

■Model Designation

Conventional Model No.

CR1/16	102	J	V
①	②	③	④

Model No.

CR16	–	102	J	V
①		②	③	④

Model No. for user who requires it.

CR16	–	102	J	V	G
①		②	③	④	⑤

①Model No.
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(CR 1)

②Resistance		
3 or 4 digit		
(Resistance)		(Marking)
0Ω	→	000
4.7Ω	→	4R7
1kΩ	→	102
1.02kΩ	→	1021

③Tolerance (%)	
Symbol	Tolerance
D	± 0.5
F	± 1.0
G	± 2.0
J	± 5.0
K	± 10.0

0Ω type is no marking

④Packaging	
Symbol	Packaging
B	Bulk
V	Paper taping
E	Embossed taping

⑤TCR	
Symbol	TCR(ppm/℃)
G	± 50
H	± 100
K	± 250
M	± 500

■Rating

*1 Model No.	Rated Wattage (W)	Tolerance (%)		Resistance (Ω)	T.C.R. (ppm /℃)	Max. Working Voltage (V)	Max. Overload Voltage (V)	0Ω Type Rated Curent (A)	0Ω Type Resistance (Ω)
CR04	0.03	F	±1	10～1M	±250	15	30	0.3	Max. 50m Ω
		G	±2	10～1M	±250				
		J	±5	10～1M	±250				
CR06 (CR1/20)	0.05	F	±1	10～1M	±200	25	50	0.5	
		G	±2	10～1M	±200				
		J	±5	1.0～9.1	±400				
		J	±5	10～10M	±200				
CR10 (CR1/16S)	0.10 *2	D	±0.5	10～97.6	±100	50	100	1.0	
		D	±0.5	100～1M	±50				
		F	±1	10～1M	±100				
		G	±2	10～1M	±200				
		J	±5	1.0～9.1	±300				
		J	±5	10～10M	±200				
CR16 (CR1/16)	0.125	D	±0.5	100～976	±100	50	100	1.0	
		D	±0.5	1K～100K	±50				
		F	±1	10～1M	±100				
		G	±2	10～1M	±200				
		J	±5	1～4.3	−100～+600				
		J	±5	4.7～3.3M	±200				
		J	±5	3.6M～10M	±300				
CR20 (CR1/10)	0.25	D	±0.5	100～1K	±100	150	200	1.5	
		F	±1	10～1K	±100				
		G	±2	10～1K	±200				
		J	±5	1～4.3	−100～+600				
		J	±5	4.7～1K	±200				
	0.25 *2	D	±0.5	1.02K～100K	±100				
		F	±1	1.02K～1M	±100				
		G	±2	1.1K～1M	±200				
		J	±5	1.1K～3.3M	±200				
		J	±5	3.6M～10M	±300				
		K	±10	11M～22M	±300				
CR32 (CR1/8)	0.25	D	±0.5	100～100K	±100	200	400	2.0	
		F	±1	10～1M	±100				
		G	±2	10～1M	±200				
		J	±5	1～4.3	−100～+600				
		J	±5	4.7～3.3M	±200				
		J	±5	3.6M～10M	±300				
		K	±10	11M～22M	±300				
CR35 (CR1/4)	0.50	D	±0.5	100～100K	±100	200	400	2.0	
		F	±1	10～1M	±100				
		G	±2	10～1M	±200				
		J	±5	1～4.3	−100～+600				
		J	±5	4.7～3.3M	±200				
		J	±5	3.6M～10M	±300				
CR50 (CR1/2)	0.75	F	±1	10～1M	±200	200	400	2.0	
		G	±2	10～1M	±300				
		J	±5	1.0～9.1	±500				
		J	±5	10～1M	±300				
CR64 (CR1)	1.00	J	±5	1.0～9.1	±500	200	400	2.0	
		J	±5	10～1M	±300				

*1 ( ):Conventional Model No.

*2 Short-time overload test condition : Voltage equal to 2.5times rated voltage⇒ Voltage equal to 1.5 times rated voltage

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

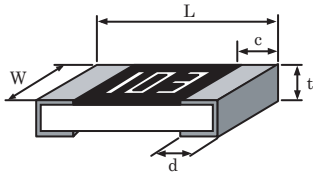
★Please apply the rated voltage or lower.

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



(mm)

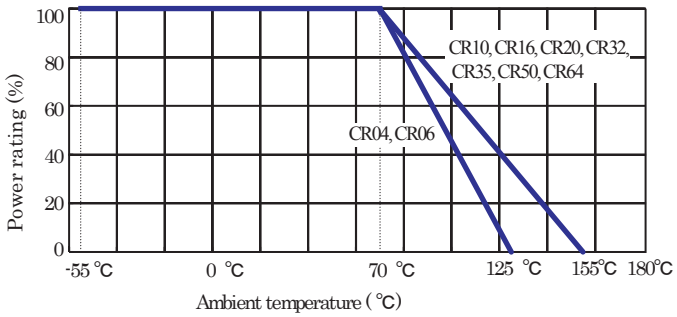
Model No. *1	L	W	c	d	t
CR04 (CR1/32)	0.40 ± 0.02	0.20 ± 0.02	0.10 ± 0.03	0.10 ± 0.03	0.13 ± 0.02
CR06 (CR1/20)	0.60 ± 0.03	0.30 ± 0.03	0.12 ± 0.05	0.15 ± 0.05	0.23 ± 0.03
CR10 (CR1/16S)	1.00 ± 0.05	0.50 ± 0.05	0.20 ± 0.10	0.25 ± 0.10	0.35 ± 0.05
CR16 (CR1/16)	1.60 ± 0.15	0.80 $^{+0.20}_{-0.10}$	0.25 ± 0.20	0.25 ± 0.20	0.45 ± 0.10
CR20 (CR1/10)	2.00 $^{+0.20}_{-0.10}$	1.25 $^{+0.20}_{-0.10}$	0.40 ± 0.20	0.40 ± 0.20	0.50 ± 0.10
CR32 (CR1/8)	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)	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)	5.00 ± 015	2.50 ± 0.20	0.60 ± 0.25	0.60 ± 0.25	0.56 ± 0.15
CR64 (CR1)	6.30 ± 0.15	3.20 ± 0.20	0.60 ± 0.25	0.60 ± 0.25	0.56 ± 0.15

*1 ( ):Conventional Model No.

■Power rating

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

Operating temperature range
CR10~CR64:-55℃+155 ℃
CR04, CR06: -55℃+125℃



■Packaging

Refer "Dimesion, Packaging,etc."