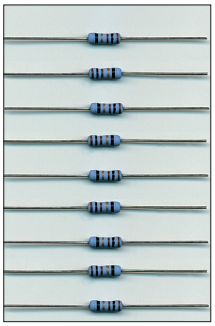
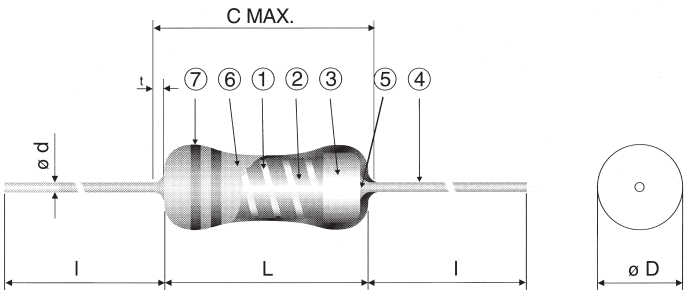
METAL GLAZE
ANTI SURGE
RCR





STRUCTURE

1 Ceramic core
2 Trimmed metal glaze
3 Steel cap (Cu, Sn plated)
4 Lead wire
5 Welding joint
6 Flame retardant coating
7 Marking

IDENTIFICATION

PRODUCT CODE	COATING COLOR	MARKING*	
		4 bands	5th band
RCR16	Blue grey	Color Code (R-value and tolerance)	–
RCR25, 50, 75, 100			Black
RCR50 + RCR50EN (1MΩ...12MΩ)			Green
RCR60			White

*Please consult KOA for details of color code marking.

All these products have Pb-free terminations and meet EU-RoHS requirements

TYPE DESIGNATION (HOW TO ORDER)

RCR	50	+	C	T52	A	106	J
PRODUCT CODE	POWER RATING 16,25: 0.25W 50: 0.5W; 60: 1W 75: 2W; 100: 3W	RECOGNIZED MARK + : RCR50+ EN: RCR50EN 'Blank': Others	TERMINATION SURFACE MATERIAL C: SnCu	TAPING & FORMING *Please see "PACKAGING"	PACKAGING A: Ammo R: Reel	NOMINAL RESISTANCE F: 4 digits J: 3 digits	RESISTANCE TOLERANCE F: (±1%) J: (±5%)

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS

FEATURES

- Excellent anti-surge characteristics
- Stable characteristics of moisture resistance even in high resistance range
- RCR50+ (1MΩ ~12MΩ), RCR50EN (1MΩ ~12MΩ) and RCR60 (1MΩ~12MΩ) are discharge resistors recognized by UL1676 and c-UL (CSA-C22.2 No.1-M94)
- RCR50EN (100kΩ~33MΩ) and RCR60 (470kΩ~56MΩ) are approved by EN60065 14.1 safety.
  (There is a case that RCR50EN cannot meet CLASS II depending on a use.)
- Ideal for use in TV's, CRT displays, copy machines, LBP's, VTR's, switching power supplies or AC adapters
- Rated ambient temperature: +70°C
- Operating temperature range: -55°C... +155°C

DIMENSIONS (mm)

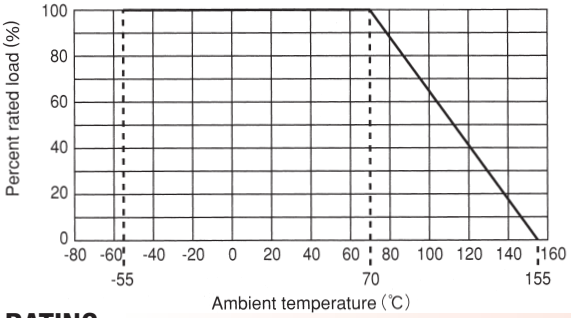
TYPE	L	C Max.	t Max.	ø D	ø d (nom.)	l*
RCR 16	3.2 ± 0.2	3.4	–	1.7 +0.2 -0.1	0.45	20 min.
RCR 25	6.3 ± 0.5	7.1	–	2.5 ± 0.5	0.6	
RCR 50	9.5 ± 1.0	–	3.0	3.5 ± 0.4	0.7	
RCR 60	9.5 +1.0 -0.2					
RCR 75	12.0 ± 1.0			4.0 ± 0.5	0.8	
RCR 100	15.5 ± 1.0			6.0 +1.0 -0.4		

*Lead length changes depending on taping and forming type.

Approvals Awarded

RCR50+ : UL1676 & c-UL (CSA-C22.2 No.1-M94) (File No. E159326)
RCR50EN : EN60065 (VDE File No. VDE-Reg.-Nr.40024807), UL1676 & c-UL (CSA-C22.2 No.1-M94) (File No. E159326)
RCR60 : EN60065 (BSI File No.8164, VDE File No.VDE-Reg.-Nr.124069), UL1676 & c-UL (CSA-C22.2 No.1-M94) (File No. E159326)

DERATING CURVE



SURGE WITHSTANDING VOLTAGE

TYPE	RCR 16	RCR25	RCR 50 • RCR 50+	RCR 50 EN RCR 60 RCR 75 RCR 100
APPLIED VOLTAGE	2kV	3kV	3.3Ω... 6.2Ω : 10kV 6.8Ω...10Ω : 7kV 11Ω... 9.1kΩ : 5kV 10kΩ... 91kΩ : 7kV 100kΩ... 33MΩ : 10kV	10kV

Discharge test: 2kV... 10kV 0.01μF capacitor discharge pulse 10 times (1pulse/5sec. max.).

RATING

DIN SIZE	TYPE	T.C.R. (ppm/K)	POWER RATING*	MAX. WORKING VOLTAGE	MAX. OVERLOAD VOLTAGE	DIELECTRIC WITHSTANDING VOLTAGE	RESISTANCE RANGE E24 • E96 F (±1%)	RESISTANCE RANGE E24 J (±5%)
0204	RCR 16	±200	0.25W	500V	1000V	300V	100kΩ... 1MΩ	100kΩ... 5.1MΩ
0207	RCR 25	±350		DC 1600V AC 1150V	DC 2000V AC 1500V	700V	100kΩ... 9.1MΩ	100kΩ... 33MΩ
0411	RCR 50	R≥100kΩ: ±350 R<100kΩ: ±500	0.5W	2000V	2500V		3.3Ω... 910kΩ	3.3Ω... 910kΩ
	RCR 50+						1MΩ... 9.1MΩ	13MΩ... 33MΩ 1MΩ... 12MΩ
	RCR 50 EN	±350					100kΩ... 9.1MΩ	100kΩ... 33MΩ
	RCR 60		1W	4000V	5000V			100kΩ... 56MΩ
0414	RCR 75		2W	5000V				100kΩ... 100MΩ
0617	RCR 100	±200	3W			1000V		100kΩ... 33MΩ

* For resistors operated at an ambient temperature of +70°C or above, the power rating shall be derated in accordance with the above derating curve.
Rated voltage = √Power rating x resistance value or max. working voltage, whichever is lower.

Contact our sales representatives before you use our products for applications including automotives, medical equipment and aerospace equipment. Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order/or use.