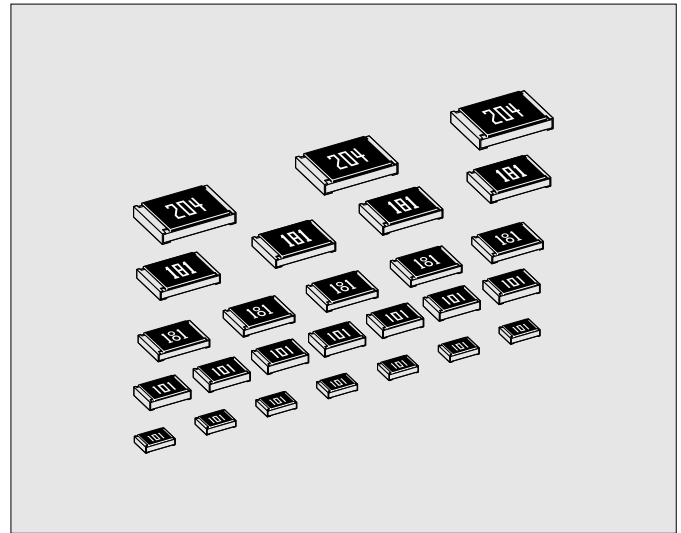


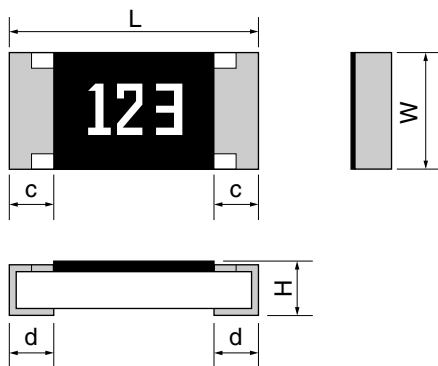
# RVC

## ●Features

1. Higher Limiting Element Voltage compared with RMC (general use)
2. Stability Class : 5%



## ●Dimensions



Rated resistance is marked with 3-digit (E24) or 4-digit (E96) on the over coating.  
RVC16 : only 3digit marking is available.

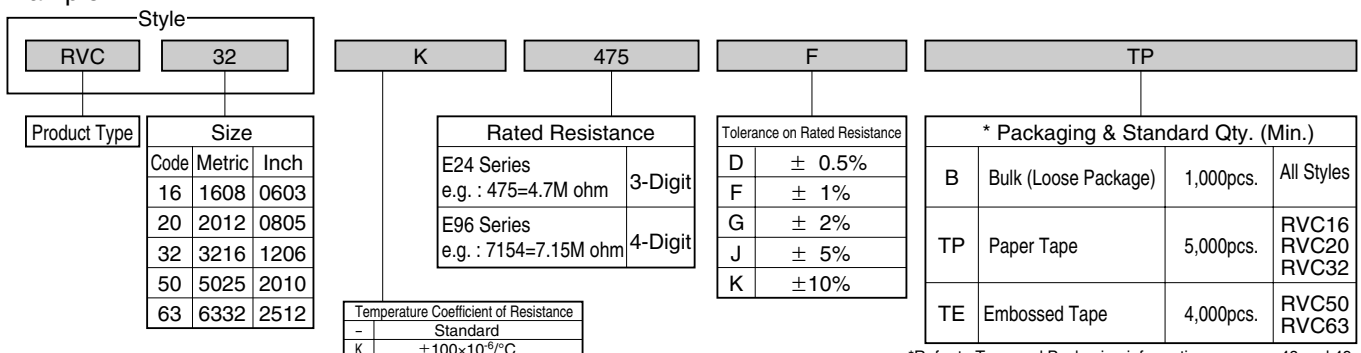
Unit : mm

Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
RVC16	1608	0603	1.6±0.1	0.8 <sup>+0.15</sup> <sub>-0.05</sub>	0.45±0.10	0.3±0.1	0.3±0.1	2mg
RVC20	2012	0805	2.0±0.1	1.25±0.10	0.55±0.10	0.4±0.2	0.4±0.2	5mg
RVC32	3216	1206	3.2±0.15	1.6±0.15	0.55±0.10	0.5±0.25	0.5±0.25	9mg
RVC50	5025	2010	5.0±0.15	2.5±0.15	0.55±0.15	0.6±0.2	0.6±0.2	25mg
RVC63	6332	2512	6.3±0.15	3.2±0.15	0.55±0.15	0.6±0.2	0.6±0.2	40mg

\*Values for reference

## ●Part Number Description

Example



\*Refer to Tape and Packaging information on pages 48 and 49.

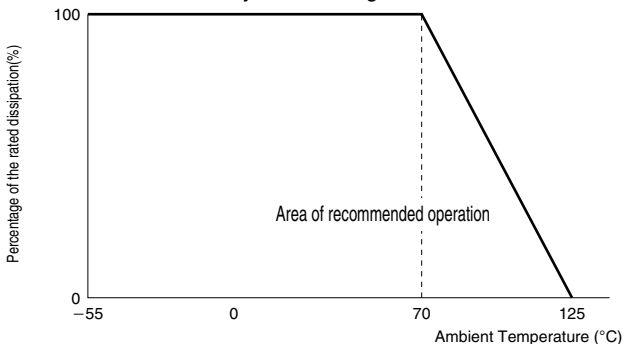
●Ratings

Style	Size Metric (Inch)	Rated Dissipation at 70°C W	Limiting Element Voltage V	Combinations of Rated Resistance Range and Tolerance on Rated Resistance			Temperature Coefficient of Resistance 10 <sup>-6</sup> /°C	Isolation Voltage V	Category Temperature Range °C
				D(±0.5%)	F(±1%), G(±2%)	J(±5%), K(±10%)			
RVC16	1608 (0603)	0.1	200	—	470Ω ~ 10MΩ		K	±100	100
				—	47Ω ~ 464Ω		—	±200	
RVC20	2012 (0805)	0.125	400	—	100Ω~10MΩ	100Ω~51MΩ	K	±100	
				—	47Ω ~ 97.6Ω		—	±200	
RVC32	3216 (1206)	0.25	500	100Ω~4.7MΩ	100Ω~10MΩ	100Ω~51MΩ	K	±100	
				—	47Ω ~ 97.6Ω		—	±200	
RVC50	5025 (2010)	0.5	500	—	470Ω~20MΩ	470Ω~51MΩ	K	±100	
				—	47Ω ~ 464Ω		—	±200	
RVC63	6332 (2512)	1.0	800	—	560Ω~20MΩ	560Ω~51MΩ	K	±100	
				—	100Ω ~ 549Ω		—	±200	
				—	47Ω ~ 97.6Ω		—	±500~-200	

Note1. E24 series is available , E96 series is available for tolerance "D" (0.5%) and "F" (1%)  
 Note2. Rated Voltage = √(Rated Dissipation)×(Rated Resistance). (d.c. or a.c. r.m.s. Voltage)  
 Note3. Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.  
 Note4. Critical Resistance Value is the resistance value at which the rated voltage is equal to the limiting element voltage.

●Derating Curve

The derated values of dissipation for temperatures in excess of 70°C shall be indicated by the following Curve.



●Climatic Category

55/125/56

Lower Category Temperature -55°C  
 Upper Category Temperature +125°C  
 Duration of the Damp heat, Steady-State Test 56 days

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements	Test Methods
Voltage proof	No breakdown or flashover R <sub>≥</sub> 1G ohm	Clause 4.7 RVC16 100Va.c.,60s RVC20~RVC63 500Va.c.,60s
Variation of resistance with temperature	See Ratings Table	Clause 4.8 Measuring temperature :+20°C/-55°C/+20°C/+125°C/+20°C
Overload	ΔR <sub>≤</sub> ±(1%+0.05 ohm) No visible damage, legible marking	Clause 4.13 The applied voltage shall be 2.5 times of the rated voltage or twice of the limiting element voltage, whichever is the less severe, 2s.
Solderability	In accordance with Clause 4.17.4.5	Clause 4.17 235°C, 2s
Resistance to soldering heat	ΔR <sub>≤</sub> ±(1%+0.05 ohm)	Clause 4.18 After immersion into the flux, the immersion into solder shall be carried out in Solder bath at 260°C for 5s.
Rapid change of temperature	ΔR <sub>≤</sub> ±(1%+0.05 ohm) No visible damage	Clause 4.19 5 cycles between -55°C and +125°C.
Climatic sequence	ΔR <sub>≤</sub> ±(5%+0.1 ohm) No visible damage	Clause 4.23 Dry/Damp heat(12+12h cycle), first cycle./ Cold/Damp heat(12+12h cycle), remaining cycle. /D.C.Load.
Damp test, steady state	ΔR <sub>≤</sub> ±(5%+0.1 ohm) No visible damage, legible marking	Clause 4.24 40°C, 95%R.H., 56 days, test a) and b) of Clause 4.24.2.1
Endurance at 70°C	ΔR <sub>≤</sub> ±(5%+0.1 ohm) No visible damage	Clause 4.25.1 Rated voltage, 1.5h"ON", 0.5h"OFF", 70°C, 1,000h.
Endurance at the upper category temperature	ΔR <sub>≤</sub> ±(5%+0.1 ohm) No visible damage	Clause 4.25.3 125°C, no-load, 1,000h.
Adhesion	No visible damage	Clause 4.32 5N, 10s
Bend strength of the face plating	ΔR <sub>≤</sub> ±(1%+0.05 ohm)	Clause 4.33 RVC16~RVC32 Amount of bend : 3 mm RVC50, 63 Amount of bend : 1 mm