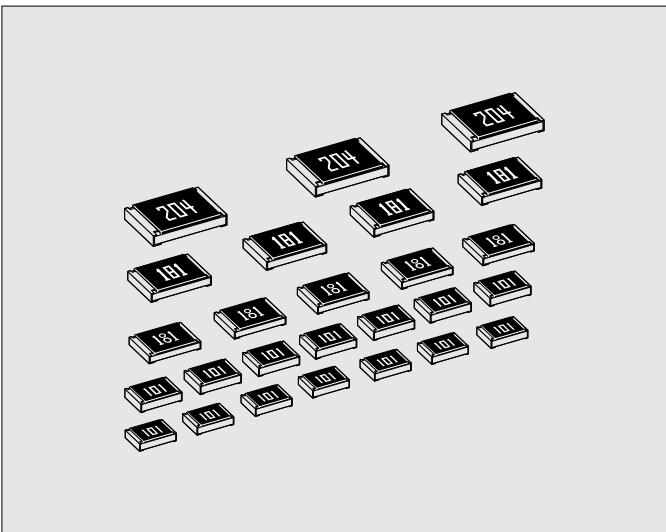


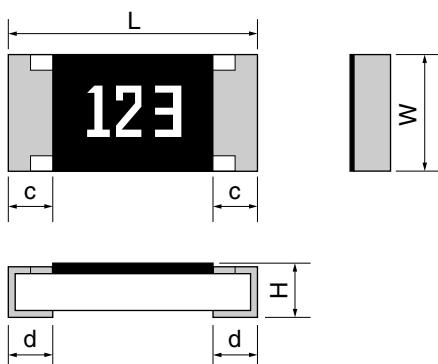
# RVC16, 20, 32, 50, 63

## ●Features

1. Anti high voltage, compared with RMC series.
2. 5 sizes available : from 0603 to 2512.
3. Stability Class : 5%



## ●Dimensions



Rated resistance is marked with 3-digit (E24 series) or 4-digit (E96 series) on the over coating.  
RVC16 4-digit marking is not available.

Unit : mm							
Style	Metric	Inch	L	W	H	c	d
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
RVC20	2012	0805	2.0±0.1	1.25±0.10	0.55±0.10	0.4±0.2	0.4±0.2
RVC32	3216	1206	3.2±0.15	1.6 ±0.15	0.55±0.10	0.5±0.25	0.5±0.25
RVC50	5025	2010	5.0±0.15	2.5 ±0.15	0.55±0.15	0.6±0.2	0.6±0.2
RVC63	6332	2512	6.3±0.15	3.2 ±0.15	0.55±0.15	0.6±0.2	0.6±0.2

\*Values for reference

## ●Part Number Description

Example

Style		K	475	F	TP
RVC	32				
Product Type	Size				
	Code Metric Inch				
16	1608	0603	E24 Series e.g. : 475=4.7M ohm	3-Digit	B Bulk (Loose Package)
20	2012	0805	E96 Series e.g. : 7154=7.15M ohm	4-Digit	TP Paper Tape
32	3216	1206			TE Embossed Tape
50	5025	2010			
63	6332	2512			
Temperature Coefficient of Resistance		Tolerance on Rated Resistance		* Packaging & Standard Qty. (Min.)	
-	Standard	F	± 1%	B	1,000pcs. All Styles
K	±100×10 <sup>-6</sup> /°C	G	± 2%	TP	5,000pcs. RVC16 RVC20 RVC32
		J	± 5%	TE	4,000pcs. RVC50 RVC63
		K	±10%		

\*Refer to Tape and Packaging information on pages 36 and 37.

## ● Ratings

Style	Rated Dissipation at 70°C W	Limiting Element Voltage V	Temperature Coefficient of Resistance Code	Combinations of Rated Resistance Range and Tolerance on Rated Resistance		Preferred Number Series for Resistors	Isolation Voltage V	Category Temperature Range °C
				10 <sup>6</sup> /°C	F(±1%) , G(±2%)			
RVC16	0.1	200	K	±100	470 ohm ~ 10M ohm	Tolerance:F(±1%)	100	-55~+125
			-	±200	47 ohm ~ 464 ohm			
RVC20	0.125	300	K	±100	100 ohm~10M ohm   100 ohm~51M ohm	Tolerance:G(±2%)	E96 Series	500
			-	±200	47 ohm ~ 97.6 ohm			
RVC32	0.25	400	K	±100	100 ohm~10M ohm   100 ohm~51M ohm	E24 Series	500	-55~+125
			-	±200	47 ohm ~ 97.6 ohm			
RVC50	0.5	500	K	±100	470 ohm~20M ohm   470 ohm~51M ohm	Tolerance:J(±5%)	500	-55~+125
			-	±200	47 ohm ~ 464 ohm			
RVC63	1.0	800	K	±100	560 ohm~20M ohm   560 ohm~51M ohm	Tolerance:K(±10%)	E24 Series	-55~+125
			-	±200	100 ohm ~ 549 ohm			
			-	+500~-200	47 ohm ~ 97.6 ohm			

Note1. Rated Voltage =  $\sqrt{(\text{Rated Dissipation}) \times (\text{Rated Resistance})}$ . (d.c. or a.c. r.m.s. Voltage)

Note2. Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.

## ● 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

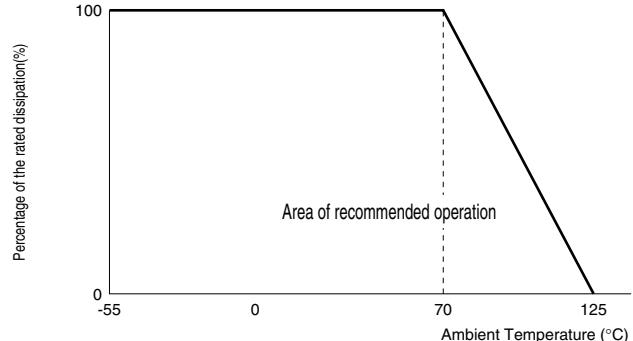
-55°C

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 $R \geq 1G\text{ ohm}$	Clause 4.7	RVC16 RVC20~RVC63	100V a.c..60s 500V a.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	$\Delta R \leq \pm(1\%+0.05\text{ ohm})$ 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	$\Delta R \leq \pm(1\%+0.05\text{ ohm})$	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	$\Delta R \leq \pm(1\%+0.05\text{ ohm})$ No visible damage	Clause 4.19	5 cycles between -55°C and +125°C.	
Climatic sequence	$\Delta R \leq \pm(5\%+0.1\text{ ohm})$ 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	$\Delta R \leq \pm(5\%+0.1\text{ ohm})$ 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	$\Delta R \leq \pm(5\%+0.1\text{ ohm})$ 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	$\Delta R \leq \pm(5\%+0.1\text{ ohm})$ 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	$\Delta R \leq \pm(1\%+0.05\text{ ohm})$	Clause 4.33	RVC16~RVC32 Amount of bend : 3 mm RVC50, 63 Amount of bend : 1 mm	