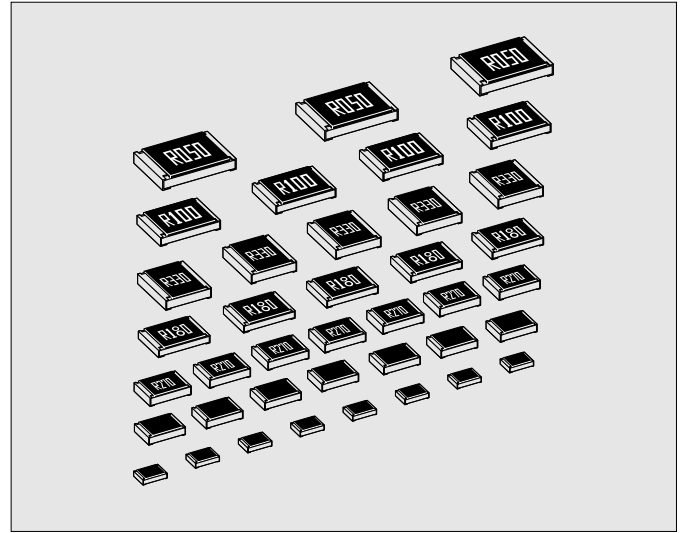




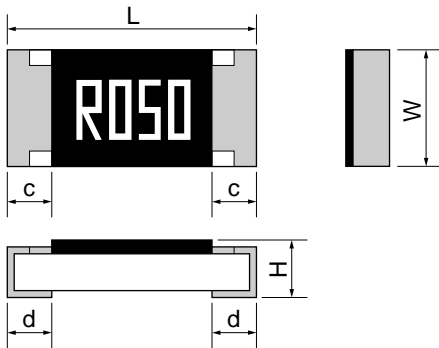
RLC10,16, 20, 32, 35, 50, 63

●Features

1. Most suitable series in a detection of current in power source circuits, motor circuits, etc.
2. 7 sizes available : 1005 to 6332.
3. Rated Dissipation is raised, compared with RMC series. (except 2512 size)
4. Stability Class : 5%



●Dimensions



Rated resistance is marked with 4-digit on the over coating. (RLC20~RLC63)
Please contact KAMAYA for marking of RLC16.

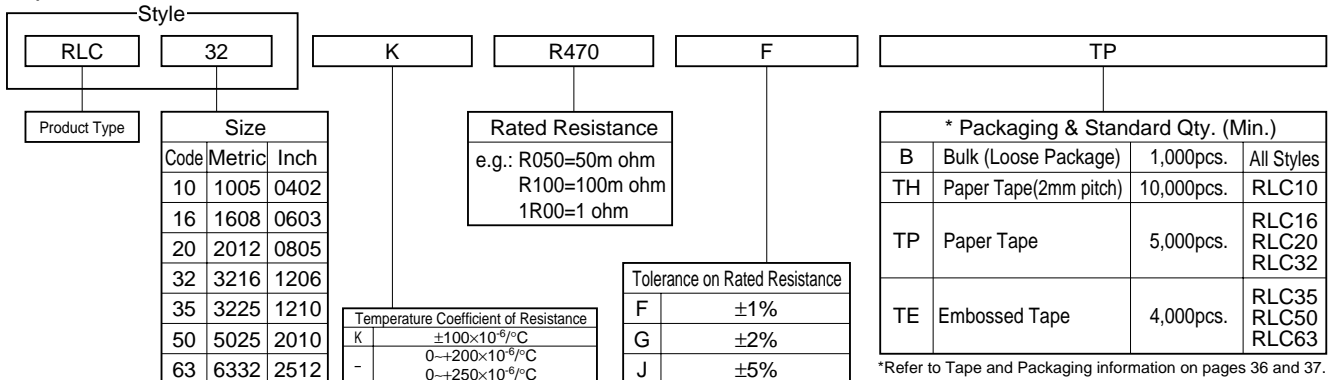
Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
NEW RLC10	1005	0402	1.0±0.05	0.5±0.05	0.35±0.05	0.2±0.1	0.25 ^{+0.05} _{-0.10}	1mg
RLC16	1608	0603	1.6±0.1	0.8 ^{+0.15} _{-0.05}	0.45±0.10	0.3±0.1	0.3±0.1	2mg
RLC20	2012	0805	2.0±0.15	1.25±0.10	0.6 ±0.1	0.4±0.2	0.4±0.2	5mg
RLC32	3216	1206	3.1±0.2	1.6 ±0.15	0.6 ±0.1	0.5±0.25	0.3 ^{+0.2} _{-0.1}	9mg
RLC35	3225	1210	3.1±0.2	2.5 ±0.15	0.6 ±0.15	0.5±0.25	0.3 ^{+0.2} _{-0.1}	16mg
RLC50	5025	2010	5.0±0.2	2.5 ±0.15	0.6 ±0.15	0.6±0.2	0.6±0.2	25mg
RLC63	6332	2512	6.3±0.2	3.2 ±0.15	0.6 ±0.15	0.6±0.2	0.6±0.2	40mg

Unit : mm

*Values for reference

●Part Number Description

Example



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

●Ratings

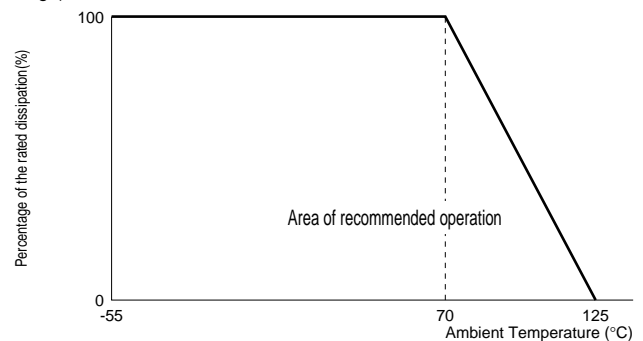
Style	Rated Dissipation at 70°C W	Rated Current Range A	Rated Resistance Range	Combinations of Rated Resistance Range, Temperature Coefficient of Resistance and Tolerance on Rated Resistance			Isolation Voltage V	Category Temperature Range °C
				Temperature Coefficient of Resistance 10 ⁻⁶ /°C	Rated Resistance Range	Tolerance on Rated Resistance		
RLC10	0.125	0.19 ~0.91	150m ohm~3.3 ohm	0~ +250 0~ +200 ±100	150m ohm~220m ohm 250m ohm~470m ohm 500m ohm~3.3 ohm	J J F, G, J	100	-55~+125
RLC16		0.19 ~1.11	100m ohm~3.3 ohm					
RLC20	0.25	0.27 ~2.23	50m ohm~3.3 ohm	0~ +250	50m ohm~180m ohm	F, G, J	500	
RLC32	0.5	0.38 ~3.16		0~ +200	200m ohm~430m ohm	F, G, J		
RLC35	0.66	0.44 ~3.63		±100	470m ohm~3.3 ohm	F, G, J		
RLC50	0.75	0.47 ~3.87						
RLC63	1.0	0.55 ~4.47						

Note1. Rated Current = $\sqrt{(\text{Rated Dissipation})/(\text{Rated Resistance})}$

Note2. Rated Voltage = $\sqrt{(\text{Rated Dissipation}) \times (\text{Rated Resistance})}$. (d.c. or a.c. r.m.s. 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

●Rated Resistance

Resistance	Code	Resistance	Code	Resistance	Code	Resistance	Code	Resistance	Code	Resistance	Code
50m ohm	R050	90m ohm	R090	200m ohm	R200	430m ohm	R430	750m ohm	R750	1.6 ohm	1R60
56m ohm	R056	100m ohm	R100	220m ohm	R220	470m ohm	R470	800m ohm	R800	1.8 ohm	1R80
60m ohm	R060	110m ohm	R110	250m ohm	R250	500m ohm	R500	900m ohm	R900	2.0 ohm	2R00
65m ohm	R065	120m ohm	R120	270m ohm	R270	560m ohm	R560	1.0 ohm	1R00	2.2 ohm	2R20
68m ohm	R068	130m ohm	R130	300m ohm	R300	600m ohm	R600	1.1 ohm	1R10	2.4 ohm	2R40
70m ohm	R070	150m ohm	R150	330m ohm	R330	650m ohm	R650	1.2 ohm	1R20	2.7 ohm	2R70
75m ohm	R075	160m ohm	R160	360m ohm	R360	680m ohm	R680	1.3 ohm	1R30	3.0 ohm	3R00
80m ohm	R080	180m ohm	R180	400m ohm	R400	700m ohm	R700	1.5 ohm	1R50	3.3 ohm	3R30

Note3. Other nominal resistances values are also available, please contact KAMAYA for further information.

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements	Test Methods
Voltage proof	No breakdown or flashover R≥1G ohm	Clause 4.7 RLC10,16 100Va.c.,60s RLC20-63 500Va.c.,60s
Variation of resistance with temperature	See Ratings Table	Clause 4.8 Measuring temperature : +20°C/+125°C/+20°C
Overload	ΔR≤±1% No visible damage, legible marking	Clause 4.13 The applied voltage shall be 2.5 times of Rated Voltage, or equivalent current 2s.
Solderability	In accordance with Clause 4.17.4.5	Clause 4.17 235°C, 2s
Resistance to soldering heat	ΔR≤±1%	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≤±1% No visible damage	Clause 4.19 5 cycles between -55°C and +125°C.
Climatic sequence	ΔR≤±5% 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≤±5% No visible damage, legible marking	Clause 4.24 40°C, 95%R.H., 56 days, test a) of Clause 4.24.2.1
Endurance at 70°C	ΔR≤±5% No visible damage	Clause 4.25.1 Rated current, 1.5h "ON", 0.5h "OFF", 70°C, 1,000h.
Endurance at the upper category temperature	ΔR≤±5% 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≤±1%	Clause 4.33 RLC10~35 Amount of bend : 3 mm RLC50, 63 Amount of bend : 1 mm