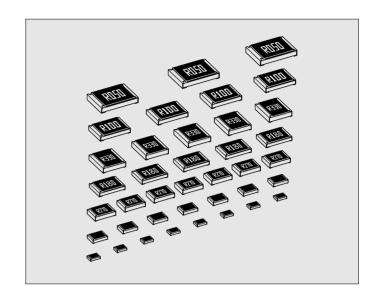
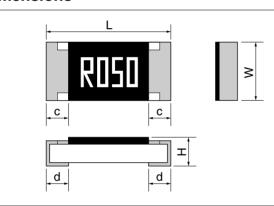
Features

RLC

- 1. Most suitable for a detection of current in power source circuits,
- 2. Raised Rated dissipation compared with RMC (except 2010,2512 size).
- 3. Stability Class: 5%



Dimensions



Rated resistance is marked with 4-digit on the over coating. (RLC20~RLC63) RLC10: only No marking is available.

Please contact KAMAYA for marking of RLC16.

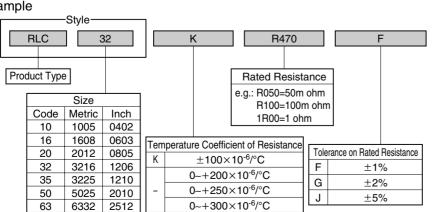
Unit : mm

Style	Metric	Inch	L	W	Н	С	d	*Unit weight/pc.
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

*Values for reference

●Part Number Description





TP					
	* Packaging & Star	dard Qty. (N	lin.)		
В	Bulk (Loose Package)	1,000pcs.	All Styles		
TH	Paper Tape(2mm pitch)	10,000pcs.	RLC10		
TP	Paper Tape	5,000pcs.	RLC16 RLC20 RLC32		
TE	Embossed Tape	4,000pcs.	RLC35 RLC50 RLC63		
Pofor to Tano and Packaging information on pages 49 and 40					

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

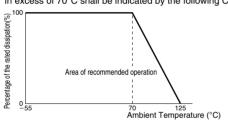
Ratings

Style	Size Metric (Inch)	Rated Dissipation at 70°C W	Rated Current Range A	Rated Resistance Range	Combinations of Rate oefficient of Resistanc Rated Resistance Range			Voltage	Category Temperature Range °C
	1005				$100 m\Omega{\sim}220 m\Omega$	J	0~ +300		
RLC10	1005 (0402)	0.125	0.19 ~1.11	100m Ω \sim 3.3 Ω	240mΩ~430mΩ	F, J			
	(0.102)				$470 m\Omega{\sim}3.3\Omega$	F, G, J	0~ +200		
					$100 \text{m}\Omega{\sim}180 \text{m}\Omega$	F, G, J	0~ +250	100	
RLC16	1608 (0603)	0.25	0.27 ~1.58	$100 m\Omega{\sim}3.3\Omega$	$200m\Omega{\sim}430m\Omega$	F, G, J	0~ +200		
	(****)				$470 m\Omega{\sim}3.3\Omega$	F, G, J	±100		− 55∼+125
RLC20	2012 (0805)	0.33	0.31 ~2.56						
RLC32	3216 (1206)	0.5	0.38 ~3.16		$50m\Omega{\sim}180m\Omega$	F, G, J	0~ +250		
RLC35	3225 (1210)	0.66	0.44 ~3.63	$50 m\Omega{\sim}3.3\Omega$	200mΩ~430mΩ	F, G, J	0~ +200	500	
RLC50	5025 (2010)	0.75	0.47 ~3.87		470mΩ~3.3Ω	F, G, J	±100		
RLC63	6332 (2512)	1.0	0.55 ~4.47						

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



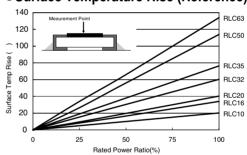
R080

Climatic Category

55/125/56

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

●Surface Temperature Rise (Reference)



*Because values are different, please contact Kamaya salesdepartment for the details about deployment condition and terms of use.

Rated	Resist	a	nce							
Resistance	Code		Resistance	Code		Resistance	Code		Resistance	Cod
50mΩ	R050		82mΩ	R082		200mΩ	R200		430mΩ	R43
51mΩ	R051		90mΩ	R090		220mΩ	R220		470mΩ	R4
56mΩ	R056		91mΩ	R091		240mΩ	R240		500mΩ	R50
60mΩ	R060		100mΩ	R100		250mΩ	R250		510mΩ	R5
62mΩ	R062		110mΩ	R110		270mΩ	R270		560mΩ	R56
65mΩ	R065		120mΩ	R120		300mΩ	R300		600mΩ	R60
68mΩ	R068		130mΩ	R130		330mΩ	R330		620mΩ	R62
70mΩ	R070		150mΩ	R150		360mΩ	R360		650mΩ	R6
75mO	R075		160m0	R160	ı	390m0	B390	ı	680m0	R6

sistance	Code	Resistance	Code
30mΩ	R430	750mΩ	R750
70mΩ	R470	800mΩ	R800
00 m Ω	R500	820mΩ	R820
10mΩ	R510	900mΩ	R900
60mΩ	R560	910mΩ	R910
00mΩ	R600	1.0Ω	1R00
20mΩ	R620	1.1Ω	1R10
50mΩ	R650	1.2Ω	1R20
80mΩ	R680	1.3Ω	1R30
00 m Ω	R700	1.5Ω	1R50

Resistance	Code
1.6Ω	1R60
1.8Ω	1R80
2.0Ω	2R00
2.2Ω	2R20
2.4Ω	2R40
2.7Ω	2R70
3.0Ω	3R00
3.3Ω	3R30

400mΩ

●Performance Characteristics JIS C 5201-1: 1998

180mΩ

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