



FIXED THICK FILM CHIP RESISTORS; RECTANGULAR TYPE & LOW OHM

RLC

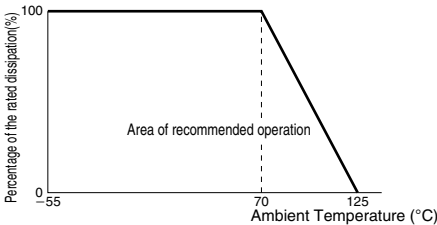
●Ratings

Style	Size Metric (Inch)	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
					Rated Resistance Range	Tolerance on Rated Resistance	Temperature Coefficient of Resistance 10 <sup>6</sup> /°C		
RLC10	1005 (0402)	0.125	0.19 ~1.11	100mΩ~3.3Ω	100mΩ~220mΩ	J	0~ +300	100	-55~+125
					240mΩ~430mΩ	F, J	0~ +200		
					470mΩ~3.3Ω	F, G, J			
RLC16	1608 (0603)	0.25	0.27 ~1.58	100mΩ~3.3Ω	100mΩ~180mΩ	F, G, J	0~ +250		
					200mΩ~430mΩ	F, G, J	0~ +200		
					470mΩ~3.3Ω	F, G, J	±100		
RLC20	2012 (0805)	0.33	0.31 ~2.56	50mΩ~3.3Ω	50mΩ~180mΩ	F, G, J	0~ +250	500	
RLC32	3216 (1206)	0.5	0.38 ~3.16						
RLC35	3225 (1210)	0.66	0.44 ~3.63						
RLC50	5025 (2010)	0.75	0.47 ~3.87						
RLC63	6332 (2512)	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

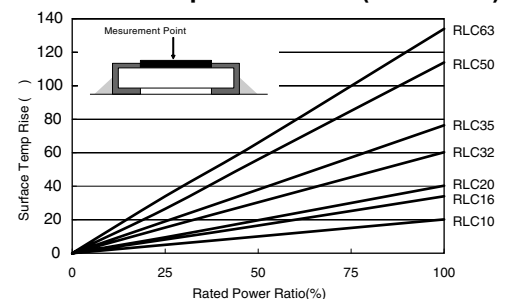
The derated values of dissipation for temperatures in excess of 70°C shall be indicated by the following Curve.



●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

●Surface Temperature Rise (Reference)



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

●Rated Resistance

50mΩ R050	82mΩ R082	200mΩ R200	430mΩ R430	750mΩ R750	1.6Ω 1R60
51mΩ R051	90mΩ R090	220mΩ R220	470mΩ R470	800mΩ R800	1.8Ω 1R80
56mΩ R056	91mΩ R091	240mΩ R240	500mΩ R500	820mΩ R820	2.0Ω 2R00
60mΩ R060	100mΩ R100	250mΩ R250	510mΩ R510	900mΩ R900	2.2Ω 2R20
62mΩ R062	110mΩ R110	270mΩ R270	560mΩ R560	910mΩ R910	2.4Ω 2R40
65mΩ R065	120mΩ R120	300mΩ R300	600mΩ R600	1.0Ω 1R00	2.7Ω 2R70
68mΩ R068	130mΩ R130	330mΩ R330	620mΩ R620	1.1Ω 1R10	3.0Ω 3R00
70mΩ R070	150mΩ R150	360mΩ R360	650mΩ R650	1.2Ω 1R20	3.3Ω 3R30
75mΩ R075	160mΩ R160	390mΩ R390	680mΩ R680	1.3Ω 1R30	
80mΩ R080	180mΩ R180	400mΩ R400	700mΩ R700	1.5Ω 1R50	

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 <sub>z</sub> ≥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 <sub>s</sub> ±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 <sub>s</sub> ±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 <sub>s</sub> ±1% No visible damage	Clause 4.19 5 cycles between -55°C and +125°C.
Climatic sequence	ΔR <sub>s</sub> ±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 <sub>s</sub> ±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 <sub>s</sub> ±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 <sub>s</sub> ±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 <sub>s</sub> ±1%	Clause 4.33 RLC10~35 Amount of bend : 3 mm RLC50, 63 Amount of bend : 1 mm