

THICK FILM LOW OHMIC CHIP RESISTORS

(RML SERIES)

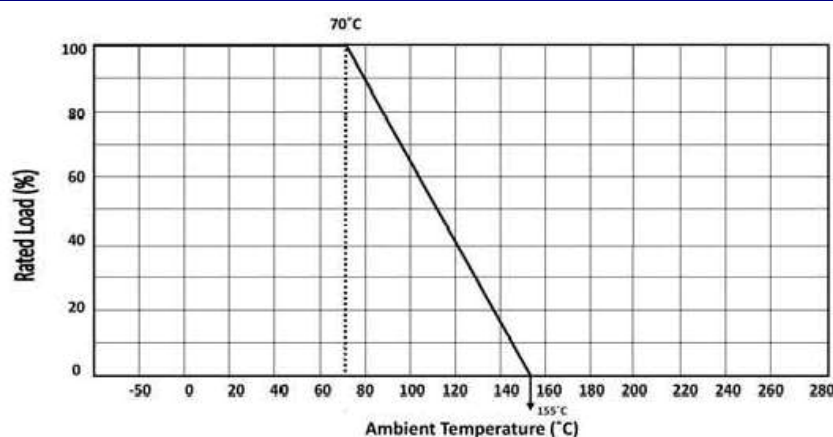
Features

- ⊙ Current sensing of Desktop & Notebook PC
- ⊙ Highly Reliable multilayer electrode construction

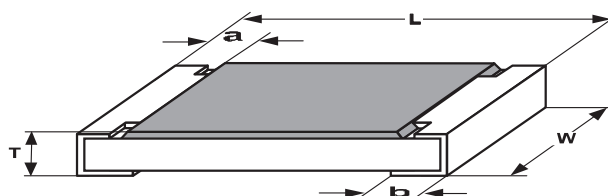
Applications

- ⊙ Automotive
- ⊙ Medical and military equipments
- ⊙ Audio and TV Tuners
- ⊙ Telecommunication Equipments
- ⊙ Video Cameras, watches, Calculators

Derating Curve



Dimensional Specifications



Style	Dimensions : mm				
	L	W	T	a	b
RML-02 0201	0.58 ±0.05	0.30 ±0.03	0.13 ±0.08	0.15 ±0.05	0.23 ±0.05
RML-04 0402	1.00 ±0.05	0.50 ±0.005	0.20 ±0.10	0.25 ±0.10	0.35 ±0.05
RML-06 0603	1.60 ±0.10	0.80 ±0.10	0.30 ±0.20	0.30 ±0.20	0.45 ±0.10
RML-10 0805	2.00 ±0.15	1.25 ±0.10	0.35 ±0.20	0.40 ±0.20	0.50 ±0.10
RML-18 1206	3.10 ±0.15	1.55±0.10	0.50 ±0.25	0.50±0.25	0.55 ±0.10
RML-20 1210	3.10 ±0.15	2.60 ±0.15	0.50 ±0.25	0.50±0.20	0.55 ±0.10
RML-22 2010	5.00 ±0.20	2.50 ±0.15	0.60 ±0.25	0.50±0.20	0.55 ±0.10
RML-24 2512	6.35 ±0.20	3.20 ±0.15	0.60 ±0.25	0.50±0.20	0.55 ±0.10
RML-37 3720	2.00 ±0.20	3.75 ±0.20	0.60 ±0.25	0.40±0.20	0.40 ±0.25
RML-75 7520	2.00 ±0.30	7.50 ±0.20	0.60 ±0.25	0.40±0.20	0.40 ±0.25
RML-50 1225	3.10 ±0.15	6.30 ±0.20	0.90 ±0.25	0.80 ±0.30	0.55 ±0.25
RML-62 0612	1.55±0.10	3.10 ±0.15	0.55 ±0.10	0.30 ±0.15	0.45 ±0.15



Electrical Characteristics

Style	RML-02	RML-04	RML-06	RML-10	RML-18	RML-20	RML-22	RML-24	RML-37	RML-75	RML-50	RML-62
	0201	0402	0603	0805	1206	1210	2010	2512	3720	7520	1225	612
Power rating at 70°C	1/20W	1/16W	1/10W	1/8W	1/4W	1/2W	3/4W	1W	1W	2W	3W	1W
operating temp.range	-55°C~ +155°C (+125°C FOR 0201)											
Derated to 0 Load at	+155°C~ (+125°C FOR 0201)											
Resistance range	0.01Ω~ 1Ω(0.003Ω~7.5Ω for 1225)											
Temperature Coefficient	Refer to chart attached											
Resistance Tolerance	±1%, ±2%, ±5%											

Characteristics

Performance	Test method	Rating
Temperature Coefficient	MIL-STD-202F,Method 304	Per Spec
Thermal shock	MIL-STD-202F,Method107G 100 cycles, -55°C to +155°C	± (0.5%+0.001Ω)
Low temperature Operation	JIS-C-5202-7.1 One hour at -65°C followed by 45 minutes RCWV	± (0.5%+0.001Ω)
Short Time Overload	MIL-R-55342D,Para4.7.5 2.5 times RCWV for 5 seconds	± (1%+0.05Ω)
Insulation Resistance	MIL-STD-202F,Method 302, 100VDC for 1 min.	>10000MΩ
Dielectric Voltage	MIL-STD-202F,Method 301, R.M.S. for 1 min.	by Type
Resistance to soldering Heat	MIL-STD-202F,Method 201 E, Soldered to test board at 260°C for 10 seconds	± (0.5%+0.05Ω)
Moisture Desistance	MIL-STD-202F,Method 103B 40 °C. 90-95% RH 42 cycles. Total 1000 hours	± (2%+0.05Ω)
Life	MIL-STD-202F,Method 108A 1000 hours at 70 °C RCWV intermittent	± (2%+0.05Ω)
Solderability	MIL-STD-202F,Method 208G,245 °C for 5 seconds	95% min. coverage

Parts Number System

RML-	O6	0R50	F	R	M
Type	Size and Wattages	Resistance	Tolerance	Standard Packing	TCR
Low ohmic chip Resistor		0R50=0.5 ohm 0R05=0.05 ohm	J = ±5% G = ±2% F = ±1%	R=Paper tape reel K=Embossed plastic tape reel Please refer to packaging explanation	Blank-per chart K ± 100ppm, L ± 200ppm M ± 300ppm, Q±800ppm N ± 400ppm, R±1200ppm O ± 500ppm, S±1500ppm P ± 600ppm



Standard TCR for LOW Ohmic Chip Resistors

Style	Resistance Range (mΩ)	TCR PPM/°C	
		Standard	Low TCR
RML-02/0201	50-147	±1000	
	150-500	±600	
	510-976	±300	
RML-04/0402	50-91	±800	±400
	100-976	±500	±300
RML-06/0603	20-47	±1200	±600
	50-91	±800	±400
	100-976	±500	±300
RML-10/0805	10-18	±1500	±600
	20-47	±1200	±600
	50-91	±800	±400
	100-976	±500	±300
RML-18/1206	10-18	±1500	±600
	20-47	±1200	±400
	50-91	±800	±300
	100-976	±500	±200
RML-20/1210	10-18	±1500	±600
	20-91	±800	±400
	100-976	±500	±200
RML-22/2010	10-18	±1500	±600
	20-91	±800	±400
	100-976	±500	±200
RML-24/2512	10-18	±1500	±600
	20-91	±800	±400
	100-976	±500	±200
RML-37/3720	10-18	±300	
	20-500	±150	
RML-75/7520	1-4	±300	
	5-10	±200	
	11-350	±150	
RML-50/1225	3-5	±300	
	6-20	±200	
	21-30	±150	
	33-7500	±100	
RML-62/0612	10-27	±600	
	30-91	±300	
	100-499	±200	
	500-1000	±100	

