

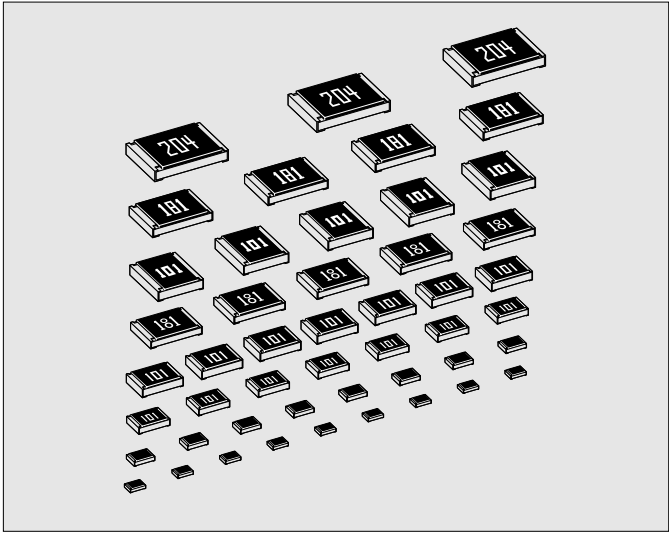
FIXED THICK FILM CHIP RESISTORS; RECTANGULAR TYPE

KAMAYA OHM

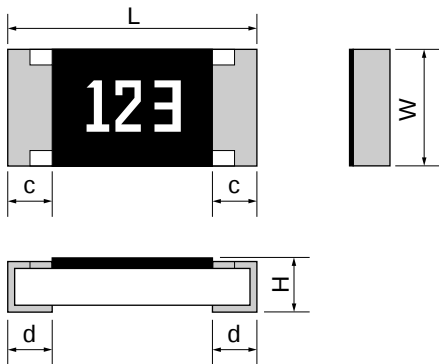
RMC

●Features

1. 0201 to 2512 inch size and Jumper chip are available.
2. 0.1W is available for 0402 inch (RMC1/16S).
3. Precise dimension by Laser-scriber method (RMC1/20).
4. Press Pocket Taping package (RMC1/20).
5. Stability Class : 5%



●Dimensions



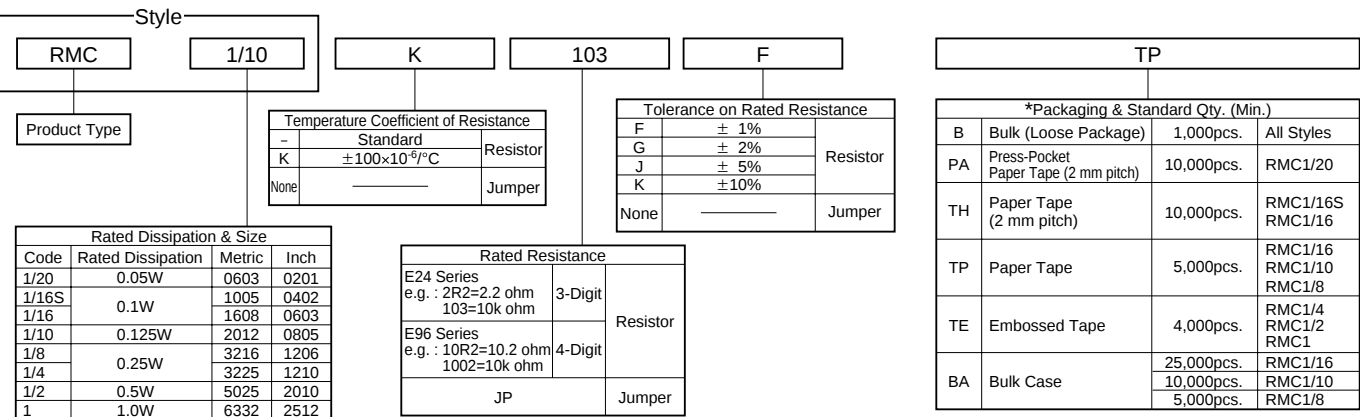
Rated resistance value is marked with 3-digit on the over coating except RMC1/16S & RMC1/20 type.
4-digit marking is available for F & G tolerance except RMC1/16, RMC1/16S & RMC1/20 type.

Style	Metric	Inch	L	W	H	c	d	*Unit weight/pc.
RMC1/20	0603	0201	0.6±0.03	0.3 ±0.03	0.23±0.03	0.1±0.05	0.15 ±0.05	0.16mg
RMC1/16S	1005	0402	1.0±0.05	0.5 ±0.05	0.35±0.05	0.2±0.1	0.25 ^{+0.05} _{-0.10}	0.6mg
RMC1/16	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
RMC1/10	2012	0805	2.0±0.1	1.25 ±0.10	0.55±0.10	0.4±0.2	0.4 ±0.2	5mg
RMC1/8	3216	1206	3.2±0.15	1.6 ±0.15	0.55±0.10	0.5±0.25	0.5 ±0.25	9mg
RMC1/4	3225	1210	3.2±0.15	2.5 ±0.15	0.55±0.15	0.5±0.25	0.5 ±0.25	16mg
RMC1/2	5025	2010	5.0±0.15	2.5 ±0.15	0.55±0.15	0.6±0.2	0.6 ±0.2	25mg
RMC1	6332	2512	6.3±0.15	3.2 ±0.15	0.55±0.15	0.6±0.2	0.6 ±0.2	40mg

*Values for reference

●Part Number Description

Example



*Refer to Tape and Packaging information on pages 38 and 39.

FIXED THICK FILM CHIP RESISTORS; RECTANGULAR TYPE

RMC

●Ratings

Style	Size Metric (Inch)	Ratings	Rated Resistance Range					Tolerance on Rated Resistance	Temperature Coefficient of Resistance		Limiting Element Voltage V	Isolation Voltage V	Category Temperature Range °C
			1Ω	10Ω	100Ω	1MΩ	10MΩ		Code	10 ⁻⁶ /°C			
RMC1/20	0603 (0201)	0.05W (1.0A)	0.47~0.91	1~9.1				J	—	+1000~+300	25	50	-55~+125
					10~97.6			F, G, J	—	+600~+200			
						100~1M		J	—	±300			
							1.1M~10M	J	—	±200			
RMC1/16S	1005 (0402)	0.1W (1.0A)	1~9.76	10~97.6				F, J	—	+500~+200	50	100	
								F, G, J	—	±200			
					100~1M			G, J	—	±100			
						1.02M~10M		F	—	±200			
RMC1/16	1608 (0603)	0.1W (1.0A)	0.47~0.91	1~9.76				F, G, J	—	+1,000~+300	50	100	
					10~1M			F, G, J	—	+500~+200			
						1.02M~4.7M		G, J	—	±200			
							5.1M~22M	F	—	±100			
RMC1/10	2012 (0805)	0.125W (2.0A)	0.27~0.91	1~9.76				F, G, J	—	+1,000~+300	150		-55~+155
					10~2.2M			G, J	—	+500~+200			
						2.2M~10M		F	—	±200			
							11M~22M	F, G, J	—	±100			
RMC1/8	3216 (1206)	0.25W (2.0A)	0.22~0.91	1~9.76				J	—	+1,000~+300	200	500	
					10~1M			F, G, J	—	+500~+200			
						1.02M~10M		G, J	—	±200			
							11M~24M	F	—	±100			
RMC1/4	3225 (1210)	0.25W (2.0A)	0.2~0.91	1~9.76				F, G, J	—	+1,000~+300	200	500	
					10~1M			G, J	—	+500~+200			
						1.02M~10M		F	—	±200			
							11M~22M	F, G, J	—	±100			
RMC1/2	5025 (2010)	0.5W (2.0A)	0.33~0.91	1~9.76				J	—	+1,000~+300	200	500	
					10~1M			F, J	—	+500~+200			
						1.1M~22M		G, J	—	±200			
								F	—	±100			
RMC1	6332 (2512)	1.0W (2.0A)	0.33~0.91	1~9.76				J	—	+1,000~+300	200	500	-55~+155
					10~1M			F, J	—	+500~+200			
								G, J	—	±200			
							1.1M~22M	F	—	±100			

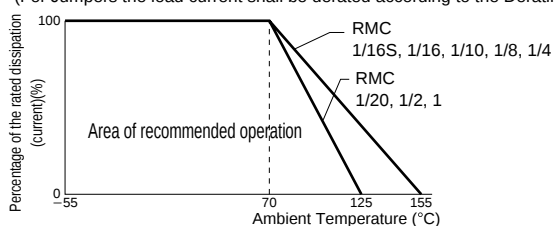
Note1. E24 series is available, E96 series is available for Tolerance "F" (1%)

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

Note3. 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.
(For Jumpers the load current shall be derated according to the Derating Curve)



●Climatic Category

55/125/56 : RMC1/20, 1/2, 1

55/155/56 : RMC1/16S, 1/16, 1/10, 1/8, 1/4

	RMC1/20, 1/2, 1	RMC1/16S, 1/16, 1/10, 1/8, 1/4
Lower Category Temperature	-55°C	-55°C
Upper Category Temperature	+125°C	+155°C
Duration of the Damp heat, Steady-State Test	56 days	56 days

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements	Test Methods
Voltage proof	No breakdown or flashover R _≥ 1G ohm	Clause 4.7 RMC1/20 50Va.c., 60s RMC1/16S, 1/16 100Va.c., 60s RMC1/10~1 500Va.c., 60s
Variation of resistance with temperature	See Ratings Table	Clause 4.8 +20°C/-55°C/+20°C/+125°C/+20°C : RMC1/20, 1/2, 1 +20°C/-55°C/+20°C/+155°C/+20°C : RMC1/16S-1/4
Overload	ΔR _≤ ±(1%+0.05 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	ΔR _≤ ±(1%+0.05 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	ΔR _≤ ±(1%+0.05 ohm) No visible damage	Clause 4.19 5 cycles between -55°C and +125°C : RMC1/20, 1/2, 1 5 cycles between -55°C and +155°C : RMC1/16S-1/4
Climatic sequence	ΔR _≤ ±(5%+0.1 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	ΔR _≤ ±(5%+0.1 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	ΔR _≤ ±(5%+0.1 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	ΔR _≤ ±(5%+0.1 ohm) No visible damage	Clause 4.25.3 125°C, no-load, 1,000h : RMC1/20, 1/2, 1 155°C, no-load, 1,000h : RMC1/16S-1/4
Adhesion	No visible damage	Clause 4.32 5N, 10s (RMC1/20 = 3N)
Bend strength of the face plating	ΔR _≤ ±(1%+0.05 ohm)	Clause 4.33 RMC1/20~1/4 Amount of bend : 3 mm RMC1/2, 1 Amount of bend : 1 mm