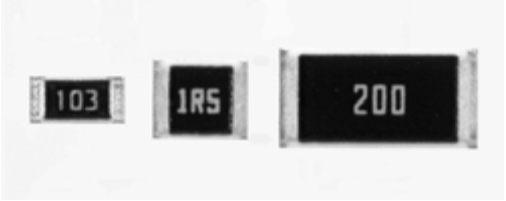
Features:

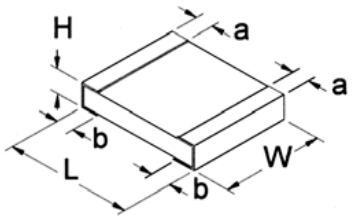
- High Power Rating
- Nickel Barrier terminations standard
- Power derating from 100% at 70ºC to zero at +155ºC
- RoHS compliant



Electrical Specifications								
Type / Code	Package Type	Power Rating (Watts) @ 70ºC	Maximum Working Voltage (1)	Maximum Overload Voltage	Maximum Current	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance	
							1%	5%
RMCP0402	0402	0.1W	50V	100V	1 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP0603	0603	0.125W	50V	100V	1 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP0805	0805	0.25W	150V	300V	2 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP1206	1206	0.33W	200V	400V	2 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP1210	1210	0.5W	200V	400V	3 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP2010	2010	1W	200V	400V	3 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP2512	2512	2W	200V	400V	3 Amp	± 200 ppm/ºC ± 100 ppm/ºC ± 200 ppm/ºC	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M

(1) Lesser of √PR or maximum working voltage.

Please refer to the High Power Resistor Application Note for more information on designing and implementing high power resistor types.

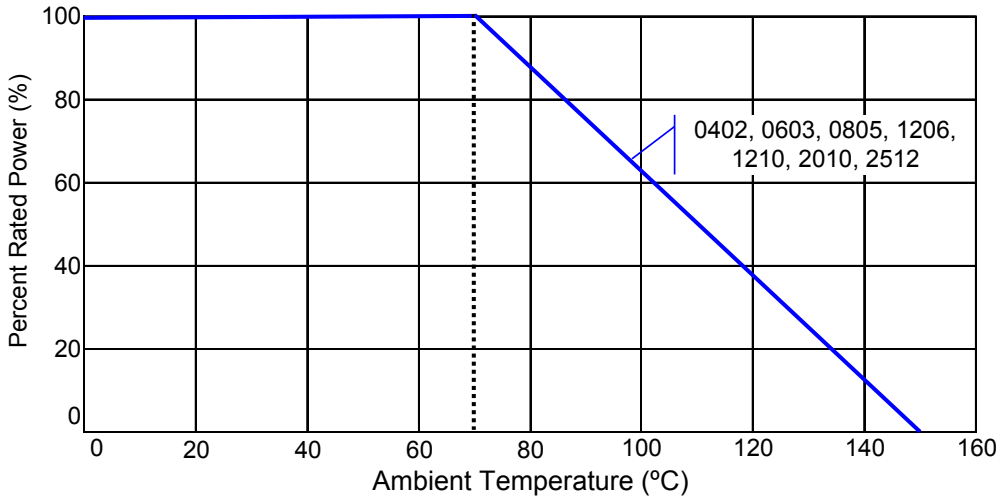


Mechanical Specifications						
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Unit
RMCP0402	0.039 ± 0.002 1.00 ± 0.05	0.020 ± 0.002 0.50 ± 0.05	0.014 ± 0.002 0.35 ± 0.05	0.008 ± 0.004 0.20 ± 0.10	0.008 ± 0.004 0.20 ± 0.10	inches mm
RMCP0603	0.063 ± 0.004 1.60 ± 0.10	0.031 ± 0.004 0.80 ± 0.10	0.018 ± 0.004 0.45 ± 0.10	0.012 ± 0.008 0.30 ± 0.20	0.012 ± 0.008 0.30 ± 0.20	inches mm
RMCP0805	0.079 ± 0.004 2.00 ± 0.10	0.049 ± 0.004 1.25 ± 0.10	0.020 ± 0.004 0.50 ± 0.10	0.014 ± 0.008 0.35 ± 0.20	0.016 ± 0.008 0.40 ± 0.20	inches mm
RMCP1206	0.122 ± 0.004 3.10 ± 0.10	0.061 ± 0.004 1.55 ± 0.10	0.021 ± 0.004 0.55 ± 0.10	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
RMCP1210	0.122 ± 0.004 3.10 ± 0.10	0.102 ± 0.006 2.60 ± 0.15	0.021 ± 0.004 0.55 ± 0.10	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
RMCP2010	0.197 ± 0.004 5.00 ± 0.10	0.098 ± 0.006 2.50 ± 0.15	0.021 ± 0.004 0.55 ± 0.10	0.024 ± 0.010 0.60 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
RMCP2512	0.250 ± 0.004 6.35 ± 0.10	0.122 ± 0.006 3.10 ± 0.15	0.021 ± 0.004 0.55 ± 0.10	0.024 ± 0.010 0.60 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm

Performance Characteristics		
Test	Test Conditions (JIS C 5202)	Test Results
Short Time Overload	2.5x rated voltage for 5 seconds	± (2% + 0.1Ω)
Dielectric Withstanding Voltage	100 VAC, 1 minute	± (1% + 0.05Ω)
Resistance to Soldering Heat	260ºC ±5ºC, for 10 sec. ±0.5 sec. (Solder Bath)	± (1% + 0.05Ω)
Solderability	235ºC ±5ºC, for 2 sec. ±0.5 sec. (Colophonium flux)	95% coverage, minimum
Temperature Cycle	-65ºC: 30 min. 25ºC: 2 to 3 min. 155ºC: 30 min. 25ºC: 2 to 3 min. (5 Cycles)	±(1% + 0.05Ω) Jumper (<0.05Ω)
Endurance (Damp load)	40ºC ± 2ºC, 90% RH, Rated Load 90 min. On, 30 min. Off for 1,000 hrs. -0hrs./+48hrs.	±(3% + 0.1Ω) Jumper (<0.05Ω)
Endurance (Rated load)	70ºC ± 2ºC, Rated Load 90 min. On, 30 min. Off for 1,000 hrs. -0hrs./+48hrs.	±(3% + 0.1Ω) Jumper (<0.05Ω)
Voltage Coefficient	1/10 rated voltage for 3 sec. max. then rated voltage for 3 sec. max.	±100 (ppm/V)
Robustness of Termination	Bend of 3mm for 5 ± 1 sec.	± (1% + 0.05 Ohm)

Operating Temperature Range: -55ºC - 155ºC

Power Derating Curve:



How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13	14
R	M	C	P	0	6	0	3	J	T	4	K	7	0

Product Series	
RMCP	High Power

Size	Power Rating
0402	0.1W
0603	0.125W
0805	0.25W
1206	0.33W
1210	0.5W
2010	1W
2512	2W

Tolerance		
Code	Tol	Value
F	1%	E96, E24
J	5%	E24

Packaging			
Code	Description	Size	Quantity
T	7" Reel Paper Tape	0402	10,000
		0603, 0805 1206, 1210	5,000
		2010, 2512	4,000
G	10" Reel Paper Tape	0603, 0805 1206, 1210	10,000

Resistance Value
Four characters with the multiplier used as the decimal holder.
1 ohm = 1R00 10 Kohm = 10K0 1 Mohm = 1M00

Legacy Part Number (before January 3, 2011):

SEI Type	Code	Nominal Resistance	Tolerance	Packaging
RMCP	0603	4.7K	5%	R

Type	Description
RMCP	High Power

Code	Wattage	Size
0402	0.1W	0402
0603	0.125W	0603
0805	0.25W	0805
1206	0.33W	1206
1210	0.5W	1210
2010	1W	2010
2512	2W	2512

Tolerance	Values
1%	E96,E24
5%	E24

SEI Types	Pkg Qty	Description	Code
0402	10,000	7" reel - paper tape	R
0603, 0805, 1206, 1210	10,000	10" reel - paper tape	G
0603, 0805, 1206, 1210	5,000	7" reel - paper tape	R
2010, 2512	4,000		