

RMCP Series

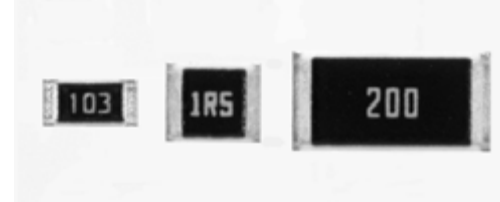
General Purpose High Power Thick Film Chip Resistors

Stackpole Electronics, Inc.

Resistive Product Solutions

Features:

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



Electrical Specifications								
Type / Code	Package Type	Power Rating (Watts) @ 70°C	Maximum Working Voltage ①	Maximum Overload Voltage	Maximum Current	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance	
							1%	5%
RMCP 0402	0402	0.100W	50V	100V	1 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP 0603	0603	0.125W	50V	100V	1 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP 0805	0805	0.250W	150V	300V	2 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP 1206	1206	0.333W	200V	400V	2 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP 1210	1210	0.500W	200V	400V	3 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP 2010	2010	1.000W	200V	400V	3 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M
RMCP 2512	2512	2.000W	200V	400V	3 Amp	± 200 ppm/°C ± 100 ppm/°C ± 200 ppm/°C	1 - 9.76 10 - 1M 1.02M - 10M	1 - 9.76 10 - 1M 1.02M - 10M

① Lesser of $\sqrt{PR}$ or maximum working voltage.

How to Order

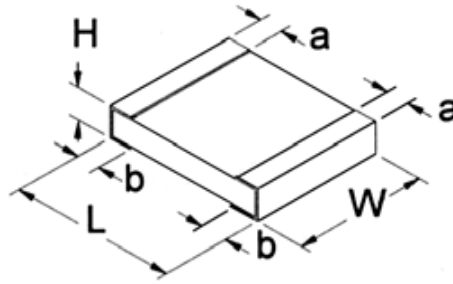
SEI Type		Code		Nominal Resistance	Tolerance		Packaging			
RMCP		0603		4.7K	5%		R			
Type	Description	Code	Wattage	Size	Tolerance	Values	SEI Types	Pkg Qty	Description	Code
RMCP	High Power	0402	0.100W	0402	1%	E96, E24	0402	10,000	7" reel - Paper	R
		0603	0.125W	0603	5%	E24	0603, 0805, 1206, 1210	10,000	10" reel - Paper	G
		0805	0.250W	0805				5,000	7" reel - Paper	R
		1206	0.330W	1206			2010, 2512	4,000	7" reel - Paper	R
		1210	0.500W	1210						
		2010	1.000W	2010						
		2512	2.000W	2512						

Rev Date: 02/12/2010

5

This specification may be changed at any time without prior notice.
Please confirm technical specifications before you order and/or use.

www.seielect.com
marketing@seielect.com



Mechanical Specifications

Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
RMCP 0402	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	0.010 +0.002/-0.004 0.25 + 0.05/-0.10	inches mm
RMCP 0603	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
RMCP 0805	0.079 ± 0.008 2.00 ± 0.20	0.049 ± 0.004 1.25 ± 0.10	0.020 ± 0.006 0.50 ± 0.15	0.016 ± 0.008 0.40 ± 0.20	0.016 ± 0.008 0.40 ± 0.20	inches mm
RMCP 1206	0.126 ± 0.008 3.20 ± 0.20	0.063 ± 0.006 1.60 ± 0.15	0.021 ± 0.006 0.55 ± 0.15	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.010 0.50 ± 0.25	inches mm
RMCP 1210	0.126 ± 0.008 3.20 ± 0.20	0.098 ± 0.008 2.50 ± 0.20	0.021 ± 0.006 0.55 ± 0.15	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.010 0.50 ± 0.25	inches mm
RMCP 2010	0.197 ± 0.008 5.00 ± 0.20	0.098 ± 0.008 2.5 ± 0.20	0.021 ± 0.006 0.55 ± 0.15	0.024 ± 0.010 0.60 ± 0.25	0.024 ± 0.010 0.60 ± 0.25	inches mm
RMCP 2512	0.248 ± 0.008 6.30 ± 0.20	0.126 ± 0.008 3.20 ± 0.20	0.021 ± 0.006 0.55 ± 0.15	0.024 ± 0.010 0.60 ± 0.25	0.024 ± 0.010 0.60 ± 0.25	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	260°C ±5°C, for 10 sec. ±0.5 sec. (Solder Bath)	± (1% + 0.05Ω)
Solderability	235°C ±5°C, for 2 sec. ±0.5 sec. (Colophonium flux)	95% coverage, minimum
Temperature Cycle	-65°C: 30 min. 25°C: 2 to 3 min. 155°C: 30 min. 25°C: 2 to 3 min. (5 Cycles)	±(1% + 0.05Ω) Jumper (<0.05Ω)
Endurance (Damp load)	40°C ± 2°C, 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)	70°C ± 2°C, 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: -65°C to +125°C (0402 size)
-65°C to +155°C (all others)