Stackpole Electronics, Inc.

General Purpose Thick Film Chip Resistor

Resistive Product Solutions

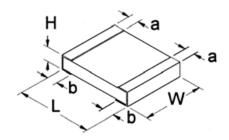
Features:

- Nickel Barrier terminations standard
- Power derating from 100% at 70°C to zero at +155°C
- Zero ohm available (max resistance 0.05Ω)
- RoHS compliant



Electrical Specifications									
T / O. I.	Old Type Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Maximum Overload Voltage	Maximum	Resistance	Ohmic Range (Ω) and Tolerance (2)		
Type / Code					Current	Temperature Coefficient	1%	5%	
RMCF0201	1/20	0.05W	25V	50V	1 Amp	± 400 ppm/°C	1 ~ 9.76	1 ~ 9.1	
14000 0201						± 200 ppm/°C	10 ~ 10M	10 ~ 10M	
	1/16S	0.063W	50V	100V	1 Amp	± 300 ppm/°C	0.2 ~ 0.590	0.2 ~ 0.56	
RMCF0402						± 200 ppm/°C	0.604 ~ 9.76	0.62 ~ 9.1	
Trivior 0402						± 100 ppm/°C	10.0 ~ 1M	10.0 ~ 1M	
						± 200 ppm/°C	1.02M ~ 10M	1.1M ~ 20M	
		0.1W	50V	100V	1 Amp	± 600 ppm/°C	0.1 ~ 0.976	0.1 ~ 0.91	
RMCF0603	1/16					± 200 ppm/°C	1 ~ 9.76	1 ~ 20M	
RIVICEU0U3						± 100 ppm/°C	10 ~ 1M	-	
						± 200 ppm/°C	1.02M ~ 10M	-	
	1/10	0.125W	150V	300V	2 Amp	± 200 ppm/°C	0.1 ~ 9.76	0.1 ~ 20M	
RMCF0805						± 100 ppm/°C	10 ~ 1M	-	
						± 200 ppm/°C	1.02M ~ 10M	-	
	1/8	0.25W	200V	400V	2 Amp	± 200 ppm/°C	0.1 ~ 9.76	0.1 ~ 20M	
RMCF1206						± 100 ppm/°C	10 ~ 1M	-	
						± 200 ppm/°C	1.02M ~ 10M	-	
	1/4	0.33W(3)	200V	400V	3 Amp	± 200 ppm/°C	0.1 ~ 0.976	0.1 ~ 0.91	
RMCF1210						± 400 ppm/°C	1 ~ 9.76	1 ~ 9.1	
RIVICE 1210						± 200 ppm/°C	-	10 ~ 20M	
						± 100 ppm/°C	10 ~ 10M	-	
RMCF2010	1/2	0.75W(3)	200V	400V	3 Amp	± 200 ppm/°C	0.1 ~ 0.976	0.1 ~ 0.91	
						± 400 ppm/°C	1 ~ 9.76	1 ~ 9.1	
						± 200 ppm/°C	-	10 ~ 10M	
						± 100 ppm/°C	10 ~ 10M	-	
RMCF2512	1	1W	200V	400V	3 Amp	± 200 ppm/°C	0.1 ~ 0.976	0.1 ~ 0.91	
						± 400 ppm/°C	1 ~ 9.76	1 ~ 9.1	
						± 200 ppm/°C	-	10 ~ 10M	
						± 100 ppm/°C	10 ~ 10M		

⁽¹⁾ Lesser of √PR or maximum working voltage. (2) Contact factory for extended ohmic value (3) Power rating is 0.500W for ohmic values below 1Ω



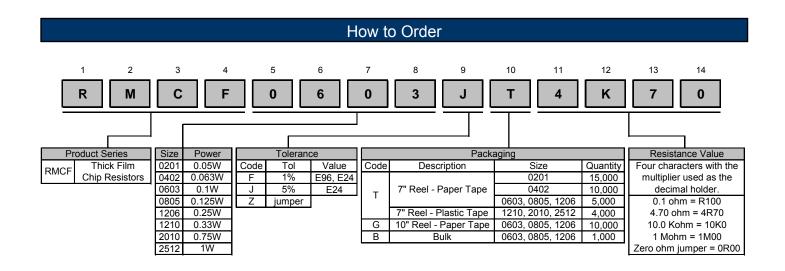
Mechanical Specifications										
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Unit				
RMCF0201	0.024 ± 0.001	0.011 ± 0.001	0.009 ± 0.0004	0.006 ± 0.002	0.006 ± 0.002	inches				
	0.60 ± 0.03	0.30 ± 0.03	0.23 ± 0.01	0.15 ± 0.05	0.15 ± 0.05	mm				
RMCF0402	0.039 ± 0.004	0.020 ± 0.002	0.011 ± 0.004	0.008 ± 0.004	0.010 ± 0.004	inches				
	1.00 ± 0.10	0.50 ± 0.05	0.30 ± 0.10	0.20 ± 0.10	0.25 ± 0.10	mm				
RMCF0603	0.061 ± 0.006	0.031 + 0.006 / - 0.004	0.018 ± 0.004	0.012 ± 0.008	0.012 ± 0.008	inches				
	1.55 ± 0.15	0.80 + 0.15 / -0.10	0.45 ± 0.10	0.30 ± 0.20	0.30 ± 0.20	mm				
RMCF0805	0.079 ± 0.008	0.049 ± 0.004	0.020 ± 0.006	0.014 ± 0.010	0.014 ± 0.010	inches				
	2.00 ± 0.20	1.25 ± 0.10	0.50 ± 0.15	0.35 ± 0.25	0.35 ± 0.25	mm				
RMCF1206	0.126 ± 0.010	0.063 ± 0.006	0.021 ± 0.006	0.020 ± 0.012	0.020 ± 0.012	inches				
	3.20 ± 0.25	1.60 ± 0.15	0.55 ± 0.15	0.50 ± 0.30	0.50 ± 0.30	mm				
RMCF1210	0.126 ± 0.010	0.098 ± 0.008	0.021 ± 0.006	0.020 ± 0.012	0.020 ± 0.012	inches				
	3.20 ± 0.25	2.50 ± 0.20	0.55 ± 0.15	0.50 ± 0.30	0.50 ± 0.30	mm				
RMCF2010	0.197 ± 0.008	0.098 ± 0.008	0.021 ± 0.006	0.024 ± 0.012	0.024 ± 0.014	inches				
	5.00 ± 0.20	2.5 ± 0.20	0.55 ± 0.15	0.60 ± 0.30	0.60 ± 0.35	mm				
RMCF2512	0.248 ± 0.008	0.126 ± 0.008	0.021 ± 0.006	0.024 ± 0.012	0.024 ± 0.014	inches				
	6.30 ± 0.20	3.20 ± 0.20	0.55 ± 0.15	0.60 ± 0.30	0.60 ± 0.35	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%					
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 hrs0hrs./+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 hrs0hrs./+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: -55°C to +125°C (0201 size)

-55°C to +155°C (all others)

Resistive Product Solutions



Legacy Part Number (before January 3, 2011):

SEI Type			Code		Nominal Resistance				Packaging				
RMC			1/16		4.7K	5%			R				
Туре	Description	Code	Wattage	Size		Tolerance	Values	ſ	SEI Types	Pkg Qty	Description	Code	
RMC	Standard	1/20	0.05W	0201		1%	E96,E24	Ī	0201	15,000	7" reel - paper tape	R	
RMCF	RoHS	1/16S	0.063W	0402		5%	E24		0402	10,000	r reer - paper tape	K	
		1/16	0.1W	0603		,				10,000	10" reel - paper tape	G	
		1/10	0.125W	0805					0603, 0805, 1206	5,000	7" reel - paper tape	R	
		1/8	0.25W	1206						1,000	bulk	Α	
		1/4	0.33W	1210					1210, 2010, 2512	4,000	7" reel - plastic tape	R	
		1/2	0.75W	2010									
		1	1W	2512									