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

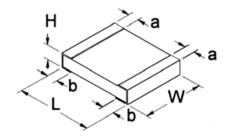


| Electrical Specifications | | | | | | | | | |
|---|------------------|--------------------------------|-----------------------------------|--------------------------------|--------------------|---------------------------|--|------------|--|
| Type / Code | Old Type Code | Power Rating (Watts) @ 70°C | Maximum Working Voltage (1) | Maximum Overload Voltage | Maximum Current | Resistance Temperature | Ohmic Range (Ω) and Tolerance (2) | | |
| .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | Coefficient | 1% | 5% | |
| RMCF0201 | 1/20 | 0.05W | 25V | 50V | 1 Amp | ± 400 ppm/°C | 1 ~ 9.76 | 1 ~ 9.1 | |
| | _ | | | | ' | ± 200 ppm/°C | 10 ~ 10M | 10 ~ 10M | |
| | | 0.063W | 50V | 100V | 1 Amp | ± 300 ppm/°C | 0.2 ~ 0.590 | 0.2 ~ 0.56 | |
| RMCF0402 | 1/16S | | | | | ± 200 ppm/°C | 0.604 ~ 9.76 | 0.62 ~ 9.1 | |
| | | | | | | ± 100 ppm/°C | 10.0 ~ 1M | 10.0 ~ 1M | |
| | | | | | | ± 200 ppm/°C | 1.02M ~ 10M | 1.1M ~ 20M | |
| | | 0.1W | 50V | 100V | | ± 600 ppm/°C | 0.1 ~ 0.976 | 0.1 ~ 0.91 | |
| RMCF0603 | 1/16 | | | | 1 Amp | ± 200 ppm/°C | 1 ~ 9.76 | 1 ~ 20M | |
| I NIVICI 0003 | | | | | | ± 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 | - | |
| DMOE4040 | 1/4 | 0.33W(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 | |
| RMCF1210 | | | | | | ± 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 | - | |
| DMOE0540 | 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 | |
| RMCF2512 | | | | | | ± 200 ppm/°C | - | 10 ~ 10M | |
| | | | | | | ± 100 ppm/°C | 10 ~ 10M | - | |
| (4) L /DE | | working voltage | (2) Contact fact | | | | 10 ~ 10M | - | |

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

⁽²⁾ Contact factory for extended ohmic values.

⁽³⁾ Power rating is 0.500W for ohmic values below 1Ω



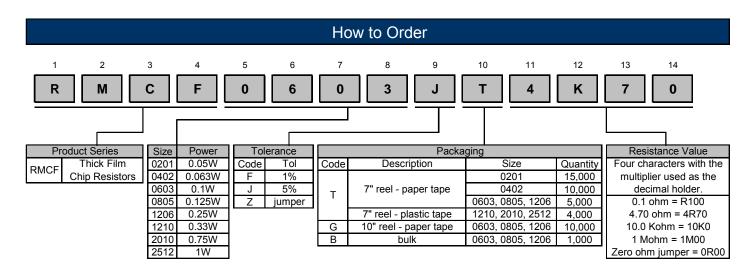
| Mechanical Specifications | | | | | | | | | | |
|---------------------------|------------------|-------------------------|------------------|----------------------|-------------------------|--------|--|--|--|--|
| Type / Code | L Body Length | W Body Width | H Body Height | a Top Termination | b Bottom Termination | Units | | | | |
| RMCF0201 | 0.024 ± 0.001 | 0.011 ± 0.001 | 0.010 ± 0.002 | 0.006 ± 0.002 | 0.006 ± 0.002 | inches | | | | |
| | 0.60 ± 0.03 | 0.30 ± 0.03 | 0.25 ± 0.05 | 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) | \pm (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 | Tolerance | | | Packaging | | | | |
|----------|-------------|-------|---------|------|-----------------------|-----------|---------|----|-----------------|---------|------------------------|------|--|
| RMC | | | 1/16 | | 4.7K | 5% | | | R | | | | |
| Туре | Description | Code | Wattage | Size | | Tolerance | Values | | SEI Types | Pkg Qty | Description | Code | |
| RMC | Standard | 1/20 | 0.05W | 0201 | | 1% | E96,E24 | | 0201 | 15,000 | 7" rool nanor tono | R | |
| RMCF | RoHS | 1/16S | 0.063W | 0402 | | 5% | E24 | | 0402 | 10,000 | 7" reel - paper tape | г | |
| | | 1/16 | 0.1W | 0603 | | | | | | 10,000 | 10" reel - paper tape | G | |
| | | 1/10 | 0.125W | 0805 | | | | 0 | 603, 0805, 1206 | 5,000 | 7" reel - paper tape | R | |
| | | 1/8 | 0.25W | 1206 | | | | | | 1,000 | bulk | Α | |
| | | 1/4 | 0.33W | 1210 | | | | 1: | 210, 2010, 2512 | 4,000 | 7" reel - plastic tape | R | |
| | | 1/2 | 0.75W | 2010 | | | | | | | · | | |
| | | 1 | 1W | 2512 | | | | | | | | | |