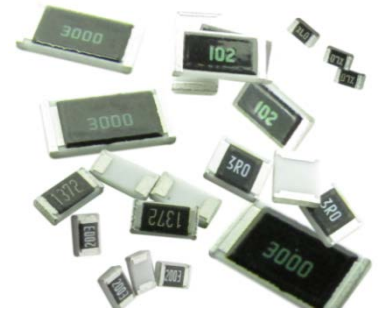


## General Purpose Thick Film Standard Power and High Power Chip Resistor

**Stackpole Electronics, Inc.**  
Resistive Product Solutions

## Features:

- RMCF – standard power ratings
- RMCP – high power ratings
- Nickel barrier terminations standard
- Power derating from 100% at 70°C to zero at +155°C
- RMCF package sizes 0402 through 2512 are qualified to AEC-Q200
- RoHS compliant



| Electrical Specifications - RMCF |                             |  |                          |                 |                                    |  |            |
|----------------------------------|-----------------------------|--|--------------------------|-----------------|------------------------------------|--|------------|
| Type / Code                      | Power Rating (Watts) @ 70°C | Maximum Working Voltage <sup>(1)</sup> | Maximum Overload Voltage | Maximum Current | Resistance Temperature Coefficient | Ohmic Range (Ω) and Tolerance <sup>(2)</sup> |            |
|                                  |                             |  |                          |                 |                                    | 1%   | 5%         |
| RMCF01005                        | 0.03W                       | 15V                                    | 30V                      | 0.5 Amp         | -200/+600 ppm/°C                   | 1 - 9.76                                     |            |
|                                  |                             |  |                          |                 | ± 250 ppm/°C                       | 10 - 1M                                      |            |
| RMCF0201                         | 0.05W                       | 25V                                    | 50V                      | 1 Amp           | ± 400 ppm/°C                       | 1 - 9.76                                     |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 10 - 10M                                     |            |
| RMCF0402                         | 0.063W                      | 50V                                    | 100V                     | 1 Amp           | ± 300 ppm/°C                       | 0.2 - 0.59                                   |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 0.604 - 9.76                                 |            |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 1M                                      |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 1.02M - 10M                                  | 1.1M - 20M |
| RMCF0603                         | 0.1W                        | 75V                                    | 150V                     | 1 Amp           | ± 600 ppm/°C                       | 0.1 - 0.976                                  |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 1 - 9.76                                     | 1 - 20M    |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 1M                                      | -          |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 1.02M - 10M                                  | -          |
| RMCF0805                         | 0.125W                      | 150V                                   | 300V                     | 2 Amp           | ± 200 ppm/°C                       | 1 - 9.76                                     | 1 - 20M    |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 1M                                      | -          |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 1.02M - 10M                                  | -          |
| RMCF1206                         | 0.25W                       | 200V                                   | 400V                     | 2 Amp           | ± 200 ppm/°C                       | 1 - 9.76                                     | 1 - 20M    |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 1M                                      | -          |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | 1.02M - 10M                                  | -          |
| RMCF1210                         | 0.33W <sup>(3)</sup>        | 200V                                   | 400V                     | 3 Amp           | ± 200 ppm/°C                       | 0.1 - 0.976                                  |            |
|                                  |                             |  |                          |                 | ± 400 ppm/°C                       | 1 - 9.76                                     |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | -  | 10 - 20M   |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 10M                                     | -          |
| RMCF2010                         | 0.75W                       | 200V                                   | 400V                     | 3 Amp           | ± 200 ppm/°C                       | 0.1 - 0.976                                  |            |
|                                  |                             |  |                          |                 | ± 400 ppm/°C                       | 1 - 9.76                                     |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | -  | 10 - 10M   |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 10M                                     | -          |
| RMCF2512                         | 1W                          | 200V                                   | 400V                     | 3 Amp           | ± 200 ppm/°C                       | 0.1 - 0.976                                  |            |
|                                  |                             |  |                          |                 | ± 400 ppm/°C                       | 1 - 9.76                                     |            |
|                                  |                             |  |                          |                 | ± 200 ppm/°C                       | -  | 10 - 10M   |
|                                  |                             |  |                          |                 | ± 100 ppm/°C                       | 10 - 10M                                     | -          |

Notes: (1) Lesser of  $\sqrt{P \cdot R}$  or maximum working voltage  
(2) Contact factory for extended ohmic values  
(3) Power rating is 0.5W for ohmic values below 1K $\Omega$

# RMCF/RMCP Series

General Purpose Thick Film Standard Power  
and High Power Chip Resistor

Stackpole Electronics, Inc.  
Resistive Product Solutions

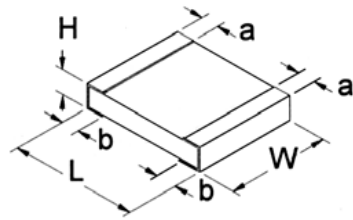
## Electrical Specifications - RMCP

| Type / Code | Power Rating<br>(Watts) @ 70°C | Maximum<br>Working<br>Voltage <sup>(1)</sup> | Maximum<br>Overload<br>Voltage | Maximum<br>Current | Resistance<br>Temperature<br>Coefficient | Ohmic Range (Ω) and Tolerance <sup>(2)</sup> |
|-------------|--------------------------------|--|--------------------------------|--------------------|--|--|
|             |                                |  |                                |                    |  | 1%, 5%                                       |
| RMCP0201    | 0.063W                         | 25V  | 50V                            | 1 Amp              | -200/+400 ppm/°C                         | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 200 ppm/°C                             | 10 - 10M                                     |
| RMCP0402    | 0.125W                         | 50V  | 100V                           | 1 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |
| RMCP0603    | 0.25W                          | 75V  | 150V                           | 1 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |
| RMCP0805    | 0.33W                          | 150V   | 300V                           | 2 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |
| RMCP1206    | 0.33W                          | 200V   | 400V                           | 2 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |
| RMCP1210    | 0.5W                           | 200V   | 400V                           | 3 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |
| RMCP2010    | 1W                             | 200V   | 400V                           | 3 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |
| RMCP2512    | 2W                             | 250V   | 500V                           | 3 Amp              | ± 200 ppm/°C                             | 1 - 9.76                                     |
|             |                                |  |                                |                    | ± 100 ppm/°C                             | 10 - 1M                                      |

Notes: (1) Lesser of  $\sqrt{P \cdot R}$  or maximum working voltage

(2) Contact factory for extended ohmic values

## Mechanical Specifications



| Type / Code   | Average Unit<br>Weight (mg) | L<br>Body Length              | W<br>Body Width               | H<br>Body Height              | a<br>Top Termination          | b<br>Bottom                   | Unit         |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------|
| RMCF01005     | 0.07                        | 0.016 ± 0.0008<br>0.40 ± 0.02 | 0.008 ± 0.0008<br>0.20 ± 0.02 | 0.005 ± 0.0008<br>0.13 ± 0.02 | 0.004 ± 0.0012<br>0.10 ± 0.03 | 0.004 ± 0.0012<br>0.10 ± 0.03 | inches<br>mm |
| RMCF/RMCP0201 | 0.16                        | 0.024 ± 0.0012<br>0.60 ± 0.03 | 0.012 ± 0.0012<br>0.30 ± 0.03 | 0.009 ± 0.0012<br>0.23 ± 0.03 | 0.006 ± 0.002<br>0.15 ± 0.05  | 0.006 ± 0.002<br>0.15 ± 0.05  | inches<br>mm |
| RMCF0402      | 0.57                        | 0.039 ± 0.004<br>1.00 ± 0.10  | 0.020 ± 0.002<br>0.50 ± 0.05  | 0.012 ± 0.004<br>0.30 ± 0.10  | 0.008 ± 0.004<br>0.20 ± 0.10  | 0.010 ± 0.006<br>0.25 ± 0.15  | inches<br>mm |
| RMCF0603      | 1.88                        | 0.061 ± 0.006<br>1.55 ± 0.15  | 0.031 ± 0.006<br>0.80 ± 0.15  | 0.018 ± 0.004<br>0.45 ± 0.10  | 0.012 ± 0.008<br>0.30 ± 0.20  | 0.012 ± 0.008<br>0.30 ± 0.20  | inches<br>mm |
| RMCF0805      | 5.00                        | 0.079 ± 0.008<br>2.00 ± 0.20  | 0.049 ± 0.004<br>1.25 ± 0.10  | 0.020 ± 0.006<br>0.50 ± 0.15  | 0.014 ± 0.010<br>0.35 ± 0.25  | 0.014 ± 0.010<br>0.35 ± 0.25  | inches<br>mm |
| RMCF1206      | 8.86                        | 0.126 ± 0.010<br>3.20 ± 0.25  | 0.063 ± 0.006<br>1.60 ± 0.15  | 0.022 ± 0.006<br>0.55 ± 0.15  | 0.020 ± 0.012<br>0.50 ± 0.30  | 0.020 ± 0.012<br>0.50 ± 0.30  | inches<br>mm |
| RMCF1210      | 15.55                       | 0.126 ± 0.010<br>3.20 ± 0.25  | 0.098 ± 0.010<br>2.50 ± 0.25  | 0.022 ± 0.006<br>0.55 ± 0.15  | 0.020 ± 0.012<br>0.50 ± 0.30  | 0.020 ± 0.012<br>0.50 ± 0.30  | inches<br>mm |
| RMCF2010      | 23.56                       | 0.197 ± 0.008<br>5.00 ± 0.20  | 0.098 ± 0.008<br>2.50 ± 0.20  | 0.022 ± 0.006<br>0.55 ± 0.15  | 0.024 ± 0.012<br>0.60 ± 0.30  | 0.024 ± 0.014<br>0.60 ± 0.35  | inches<br>mm |
| RMCF2512      | 40.02                       | 0.248 ± 0.008<br>6.30 ± 0.20  | 0.126 ± 0.010<br>3.20 ± 0.25  | 0.022 ± 0.006<br>0.55 ± 0.15  | 0.024 ± 0.012<br>0.60 ± 0.30  | 0.024 ± 0.014<br>0.60 ± 0.35  | inches<br>mm |

# RMCF/RMCP Series

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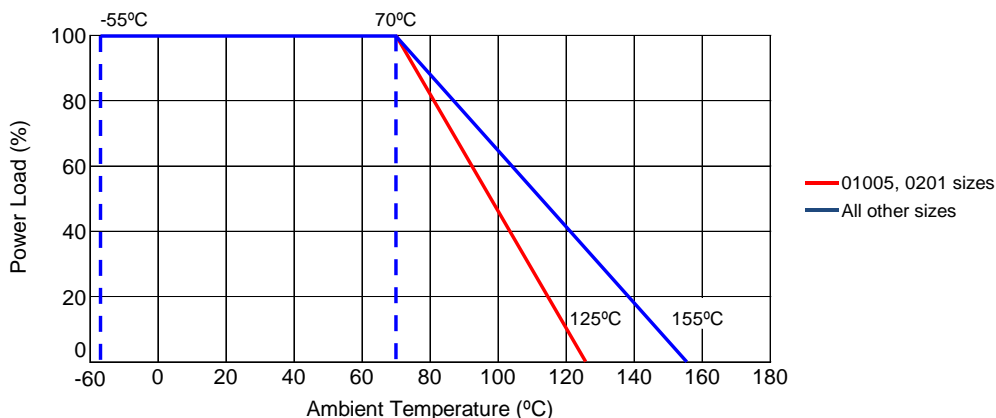
Stackpole Electronics, Inc.

Resistive Product Solutions

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

Operating Temperature Range: -55°C to +125°C (0201 size)  
-55°C to +155°C (all others)

## Power Derating Curve:



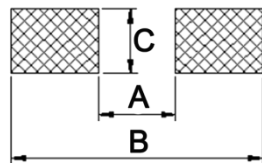
# RMCF/RMCP Series

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## Solder Land Pattern

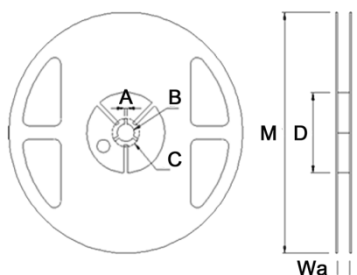


| Type / Code | A             | B             | C             | Unit         |
|-------------|---------------|---------------|---------------|--------------|
| 01005       | 0.008<br>0.20 | 0.020<br>0.50 | 0.008<br>0.20 | inches<br>mm |
| 0201        | 0.012<br>0.30 | 0.039<br>1.00 | 0.016<br>0.40 | inches<br>mm |
| 0402        | 0.020<br>0.50 | 0.059<br>1.50 | 0.024<br>0.60 | inches<br>mm |
| 0603        | 0.031<br>0.80 | 0.083<br>2.10 | 0.035<br>0.90 | inches<br>mm |
| 0805        | 0.047<br>1.20 | 0.118<br>3.00 | 0.051<br>1.30 | inches<br>mm |
| 1206        | 0.087<br>2.20 | 0.165<br>4.20 | 0.063<br>1.60 | inches<br>mm |
| 1210        | 0.087<br>2.20 | 0.165<br>4.20 | 0.110<br>2.80 | inches<br>mm |
| 2010        | 0.138<br>3.50 | 0.240<br>6.10 | 0.110<br>2.80 | inches<br>mm |
| 2512        | 0.150<br>3.80 | 0.315<br>8.00 | 0.138<br>3.50 | inches<br>mm |

## Packaging (EIA Standard RS-481)

### Packaging Specifications

Nominal dimensions:  
Inches (mm)



| Reel Type / Tape      | Wa                            | M                               | A                            | B                             | C                             | D                              | Unit         |
|-----------------------|-------------------------------|---------------------------------|------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------|
| 7" reel for 8mm tape  | 0.354 ± 0.020<br>9.00 ± 0.50  | 7.008 ± 0.079<br>178.00 ± 2.00  | 0.079 ± 0.020<br>2.00 ± 0.50 | 0.531 ± 0.020<br>13.50 ± 0.50 | 0.827 ± 0.020<br>21.00 ± 0.50 | 2.362 ± 0.039<br>60.00 ± 1.00  | inches<br>mm |
| 10" reel for 8mm tape | 0.394 ± 0.020<br>10.00 ± 0.50 | 10.000 ± 0.079<br>254.00 ± 2.00 | 0.079 ± 0.020<br>2.00 ± 0.50 | 0.531 ± 0.020<br>13.50 ± 0.50 | 0.827 ± 0.020<br>21.00 ± 0.50 | 3.937 ± 0.039<br>100.00 ± 1.00 | inches<br>mm |

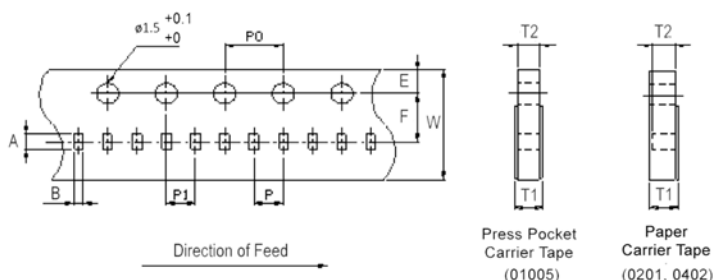
# RMCF/RMCP Series

General Purpose Thick Film Standard Power  
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Stackpole Electronics, Inc.

Resistive Product Solutions

## Taping Specifications (01005, 0201, 0402)



| Type      | 7" Reel Quantity | Typical Full Reel Weight (g) | Tape Width    | A                            | B                            | W                            | E                            | F                            | Unit         |
|-----------|------------------|------------------------------|---------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| RMCF01005 | 20,000           | 127.3 ± 12.0                 | 0.315<br>8.00 | 0.018 ± 0.001<br>0.45 ± 0.02 | 0.010 ± 0.001<br>0.25 ± 0.02 | 0.315 ± 0.012<br>8.00 ± 0.30 | 0.069 ± 0.004<br>1.75 ± 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm |
| RMCF0201  | 10,000           | 97.2 ± 9.0                   | 0.315<br>8.00 | 0.027 ± 0.002<br>0.68 ± 0.05 | 0.015 ± 0.001<br>0.38 ± 0.03 | 0.315 ± 0.004<br>8.00 ± 0.10 | 0.069 ± 0.004<br>1.75 ± 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm |
| RMCF0402  | 10,000           | 94.5 ± 9.0                   | 0.315<br>8.00 | 0.045 ± 0.002<br>1.15 ± 0.05 | 0.026 ± 0.002<br>0.65 ± 0.05 | 0.315 ± 0.008<br>8.00 ± 0.20 | 0.069 ± 0.004<br>1.75 ± 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm |

| Type      | T1                           | T2                           | P                            | P0                           | P1                           | Unit         |
|-----------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| RMCF01005 | 0.012 ± 0.001<br>0.31 ± 0.03 | 0.007 ± 0.001<br>0.17 ± 0.03 | 0.079 ± 0.002<br>2.00 ± 0.05 | 0.157 ± 0.002<br>4.00 ± 0.05 | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |
| RMCF0201  | 0.019 ± 0.002<br>0.47 ± 0.05 | 0.011 ± 0.001<br>0.28 ± 0.02 | 0.079 ± 0.002<br>2.00 ± 0.05 | 0.157 ± 0.002<br>4.00 ± 0.05 | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |
| RMCF0402  | 0.020 ± 0.004<br>0.50 ± 0.10 | 0.016 ± 0.002<br>0.40 ± 0.05 | 0.079 ± 0.004<br>2.00 ± 0.10 | 0.157 ± 0.002<br>4.00 ± 0.05 | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |

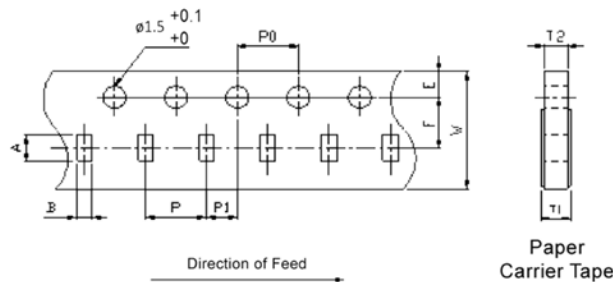
# RMCF/RMCP Series

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Stackpole Electronics, Inc.

Resistive Product Solutions

## Taping Specifications (0603, 0805, 1206, 1210)



| Type     | 7" Reel Quantity <sup>(1)</sup> | Typical Full Reel Weight (g) | Tape Width                   | A                            | B                            | W                            | E                            | F                            | Unit                         |              |
|----------|---------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| RMCF0603 | 5000                            | 118.3 ± 11.0                 | 0.315<br>8.00                | 0.071 ± 0.004<br>1.80 ± 0.10 | 0.039 ± 0.004<br>1.00 ± 0.10 | 0.315 ± 0.008<br>8.00 ± 0.20 | 0.069 + 0.004<br>1.75 + 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm                 |              |
| RMCF0805 | 5000                            | 139.2 ± 13.0                 | 0.315<br>8.00                | 0.091 ± 0.004<br>2.30 ± 0.10 | 0.061 ± 0.004<br>1.55 ± 0.10 | 0.315 ± 0.008<br>8.00 ± 0.20 | 0.069 + 0.004<br>1.75 + 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm                 |              |
| RMCF1206 | 5000                            | 151.4 ± 15.0                 | 0.315<br>8.00                | 0.138 ± 0.008<br>3.50 ± 0.20 | 0.075 ± 0.008<br>1.90 ± 0.20 | 0.315 ± 0.008<br>8.00 ± 0.20 | 0.069 + 0.004<br>1.75 + 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm                 |              |
| RMCF1210 | 4000                            | 175.7 ± 17.0                 | 0.315<br>8.00                | 0.138 ± 0.008<br>3.50 ± 0.20 | 0.071 ± 0.008<br>1.80 ± 0.20 | 0.315 ± 0.008<br>8.00 ± 0.20 | 0.069 + 0.004<br>1.75 + 0.10 | 0.138 ± 0.002<br>3.50 ± 0.05 | inches<br>mm                 |              |
| Type     | T1                              |                              | T2                           |                              | P                            |                              | P0                           |                              | P1                           | Unit         |
| RMCF0603 | 0.028 + 0.004<br>0.70 + 0.10    |                              | 0.024 ± 0.004<br>0.60 ± 0.10 |                              | 0.157 ± 0.004<br>4.00 ± 0.10 |                              | 0.157 ± 0.002<br>4.00 ± 0.05 |                              | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |
| RMCF0805 | 0.033 + 0.004<br>0.85 + 0.10    |                              | 0.030 ± 0.004<br>0.75 ± 0.10 |                              | 0.157 ± 0.004<br>4.00 ± 0.10 |                              | 0.157 ± 0.002<br>4.00 ± 0.05 |                              | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |
| RMCF1206 | 0.033 + 0.004<br>0.85 + 0.10    |                              | 0.030 ± 0.004<br>0.75 ± 0.10 |                              | 0.157 ± 0.004<br>4.00 ± 0.10 |                              | 0.157 ± 0.002<br>4.00 ± 0.05 |                              | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |
| RMCF1210 | 0.033 + 0.004<br>0.85 + 0.10    |                              | 0.030 ± 0.004<br>0.75 ± 0.10 |                              | 0.157 ± 0.004<br>4.00 ± 0.10 |                              | 0.157 ± 0.002<br>4.00 ± 0.05 |                              | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |

Note (1): 10" and 13" reels are also available.

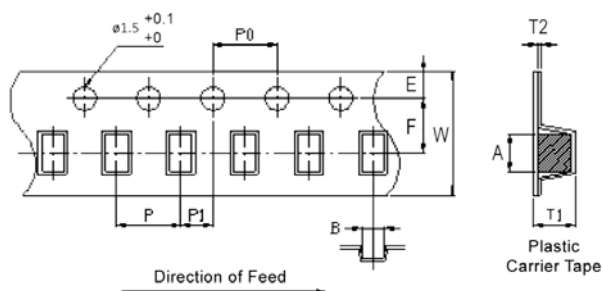
# RMCF/RMCP Series

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Stackpole Electronics, Inc.

Resistive Product Solutions

## Taping Specifications (2010, 2512)



| Type     | 7" Reel Quantity             | Typical Full Reel Weight (g) | Tape Width                   | A                            | B                            | W                             | E                            | F                            | Unit         |
|----------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|------------------------------|--------------|
| RMCF2010 | 4,000                        | 183.1 ± 18.0                 | 0.472<br>12.00               | 0.217 ± 0.008<br>5.50 ± 0.20 | 0.110 ± 0.008<br>2.80 ± 0.20 | 0.472 ± 0.008<br>12.00 ± 0.20 | 0.069 ± 0.004<br>1.75 ± 0.10 | 0.217 ± 0.002<br>5.50 ± 0.05 | inches<br>mm |
| RMCF2512 | 4,000                        | 255.3 ± 25.0                 | 0.472<br>12.00               | 0.264 ± 0.008<br>6.70 ± 0.20 | 0.134 ± 0.008<br>3.40 ± 0.20 | 0.472 ± 0.008<br>12.00 ± 0.20 | 0.069 ± 0.004<br>1.75 ± 0.10 | 0.217 ± 0.002<br>5.50 ± 0.05 | inches<br>mm |
| Type     | T1                           |                              | T2                           |                              | P                            | P0                            |                              | P1                           | Unit         |
| RMCF2010 | 0.043 ± 0.006<br>1.10 ± 0.15 |                              | 0.009 ± 0.006<br>0.23 ± 0.15 |                              | 0.157 ± 0.004<br>4.00 ± 0.10 | 0.157 ± 0.002<br>4.00 ± 0.05  |                              | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |
| RMCF2512 | 0.043 ± 0.006<br>1.10 ± 0.15 |                              | 0.009 ± 0.006<br>0.23 ± 0.15 |                              | 0.157 ± 0.004<br>4.00 ± 0.10 | 0.157 ± 0.002<br>4.00 ± 0.05  |                              | 0.079 ± 0.002<br>2.00 ± 0.05 | inches<br>mm |

Note: Plastic carrier tape used for 2010 and 2512 sizes.

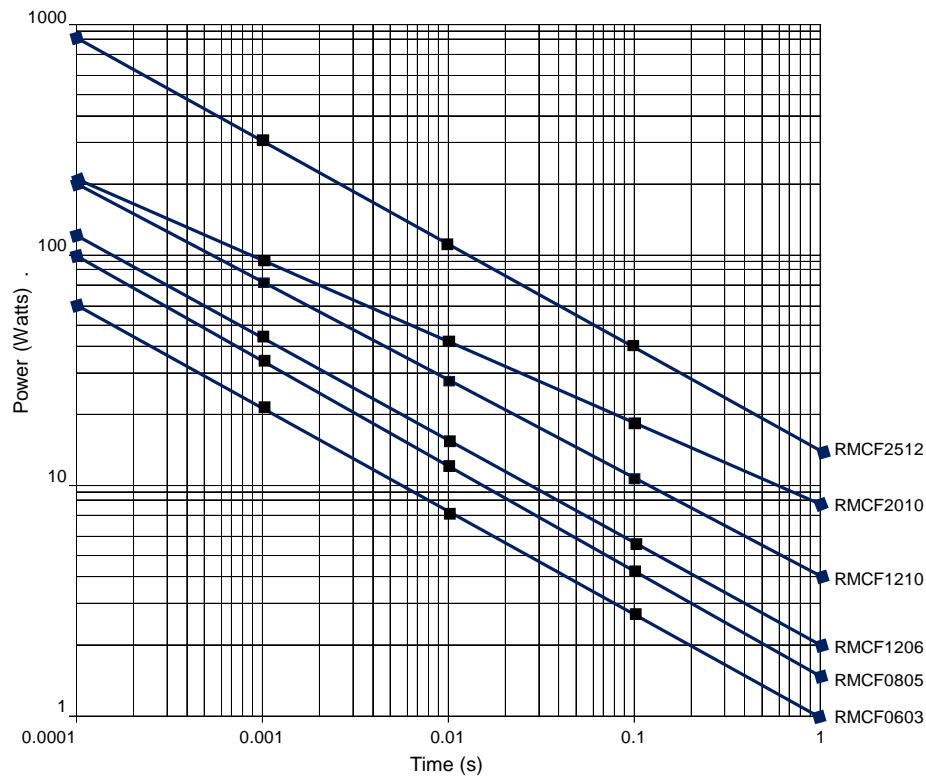
# RMCF/RMCP Series

General Purpose Thick Film Standard Power  
and High Power Chip Resistor

Stackpole Electronics, Inc.

Resistive Product Solutions

## Single Pulse Power



| Size     | Time (s) |       |      |     |     | Unit  |
|----------|----------|-------|------|-----|-----|-------|
|          | 0.0001   | 0.001 | 0.01 | 0.1 | 1   |       |
| RMCF0603 | 60       | 21.5  | 7.6  | 2.8 | 1   | Watts |
| RMCF0805 | 94       | 34    | 12   | 4.4 | 1.6 | Watts |
| RMCF1206 | 120      | 43    | 15   | 5.6 | 2   | Watts |
| RMCF1210 | 240      | 86    | 31   | 11  | 4   | Watts |
| RMCF2010 | 210      | 96    | 41   | 18  | 8   | Watts |
| RMCF2512 | 800      | 300   | 110  | 42  | 16  | Watts |

The data provided are for reference only. They are typical performance for this product but are not guaranteed. The actual pulse handling of each individual resistor may vary depending on a variety of factors including resistance tolerance and resistance value. Stackpole Electronics, Inc. assumes no liability for the use of this information. Customers should validate the performance of these products in their applications. Contact Stackpole marketing to discuss specific pulse application requirements.

## Temperature Measurement of Resistor Surface

Description: The resistor surface generated temperature variation after applied rated voltage.

Products and power:

| Stackpole P/N         | RMCF0201 | RMCF0402 | RMCF0603 | RMCF0805 | RMCF1206 | RMCF1210 | RMCF2010 | RMCF2512 |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| R-V                   | 15K      | 40.2K    | 57.6K    | 180K     | 182K     | 100K     | 100K     | 75K      |
| Rated Power           | 1/20W    | 1/16W    | 1/10W    | 1/8W     | 1/4W     | 1/2W     | 3/4W     | 1W       |
| Maximum Rated Voltage | 25V      | 50V      | 75V      | 150V     | 200V     | 200V     | 200V     | 200V     |

Test method: Measure component surface temperature directly after the temperature stabilizes.



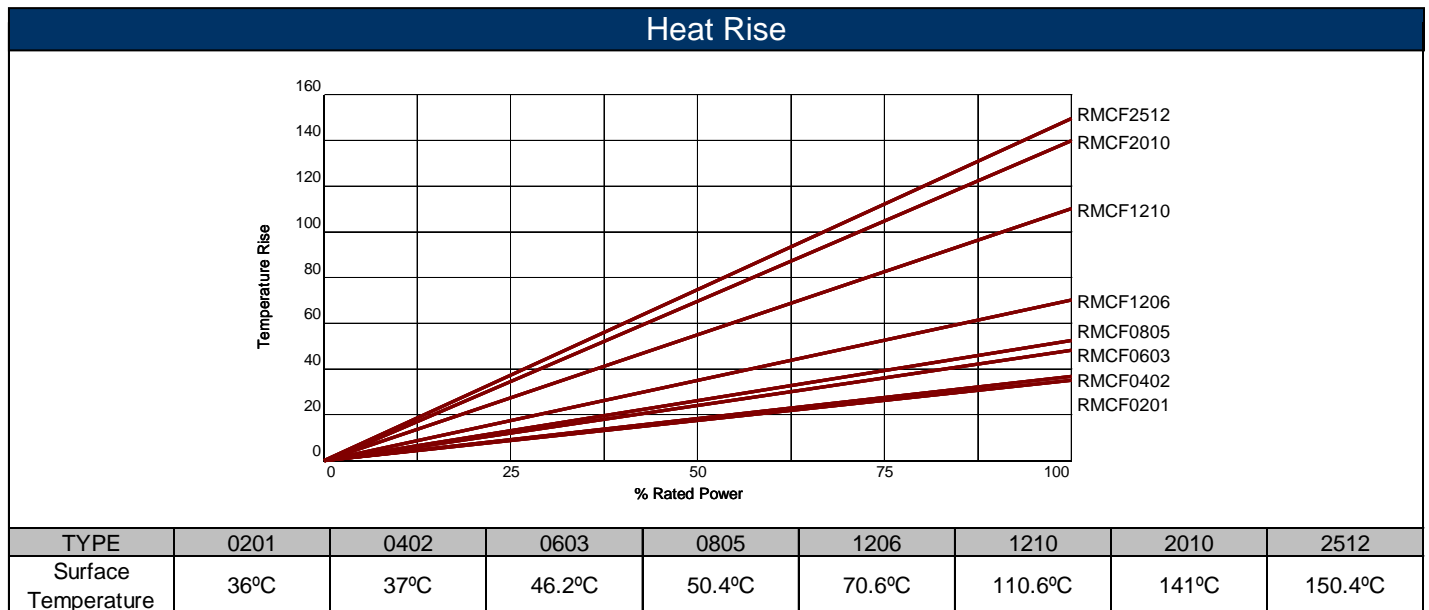
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Test result: As per table below:



### How to Order RMCF

1

2

3

4

5

6

7

8

9

10

11

12

13

14

R

M

C

F

0

6

0

3

J

T

4

K

7

0

Product Series

RMCFThick Film Chip Resistors

Size

010050.03W  
02010.05W  
04020.063W  
06030.1W  
08050.125W  
12060.25W  
12100.33W(\*)  
20100.75W  
25121W

Power

Tolerance

Code

F

J

Z

Tol

1%

5%

jumper

Value

E96, E24

E24

Packaging

Code

T

G

B

Description

7" Reel - Paper Tape

7" Reel - Plastic Tape

10" Reel - Paper Tape

Bulk

Size

01005  
0201, 0402  
0603, 0805, 1206  
1210  
2010, 2512

Quantity

20,000  
10,000  
5,000  
4,000  
4,000

Resistance Value

Four characters with the multiplier used as the decimal holder.

0.1 ohm = R100

4.70 ohm = 4R70

10.0 Kohm = 10K0

1 Mohm = 1M00

Zero ohm jumper = 0R00

(\*) Power rating is 0.5W for Ohmic values below 1KΩ

How to Order RMCP

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|
| 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 |            | Size | Power Rating | Tolerance |     |          | Packaging |                     |            |          | Resistance Value   |
|----------------|------------|------|--------------|-----------|-----|----------|-----------|---------------------|------------|----------|--|
| RMCP           | High Power | 0201 | 0.063W       | Code      | Tol | Value    | Code      | Description         | Size       | Quantity | Four characters with the multiplier used as the decimal holder.<br><br>1 ohm = 1R00<br>10 Kohm = 10K0<br>1 Mohm = 1M00 |
|                |            | 0402 | 0.125W       | F         | 1%  | E96, E24 | T         | 7" Reel Paper Tape  | 0201, 0402 | 10,000   |  |
|                |            | 0603 | 0.25W        |           |     |          |           |                     | 0603, 0805 | 5,000    |  |
|                |            | 0805 | 0.33W        | J         | 5%  | E24      |           |                     | 1206, 1210 |          |  |
|                |            | 1206 | 0.33W        |           |     |          |           |                     | 2010, 2512 | 4,000    |  |
|                |            | 1210 | 0.5W         |           |     |          | G         | 10" Reel Paper Tape | 0603, 0805 | 10,000   |  |
|                |            | 2010 | 1W           |           |     |          |           |                     | 1206, 1210 |          |  |
|                |            | 2512 | 2W           |           |     |          |           |                     | 2010       | 8,000    |  |