

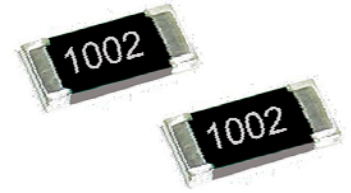
# RHC Series

High Power Thick Film Chip Resistor

Stackpole Electronics, Inc.

Resistive Product Solutions

- Features:
- ✓ Handles 2W of power
  - ✓ Resistances from 0.1Ω to 1MΩ
  - ✓ RoHS compliant / lead-free
  - ✓ TCR of  $\pm 100$  ppm/°C
  - ✓ 1% and 5% tolerances
  - ✓ Runs significantly cooler than standard thick film 2512 chip



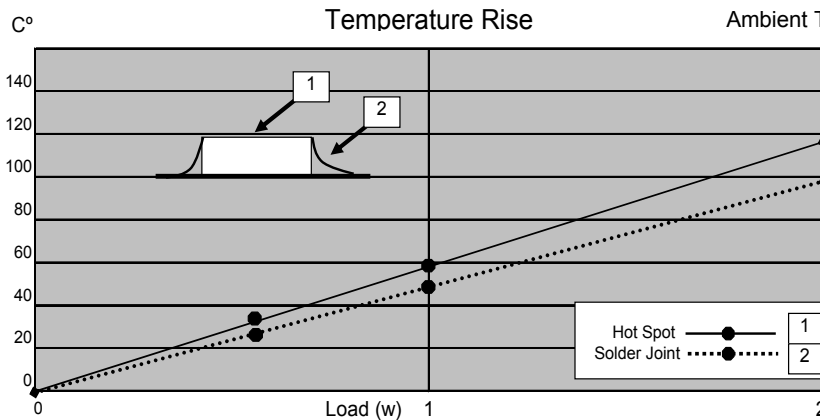
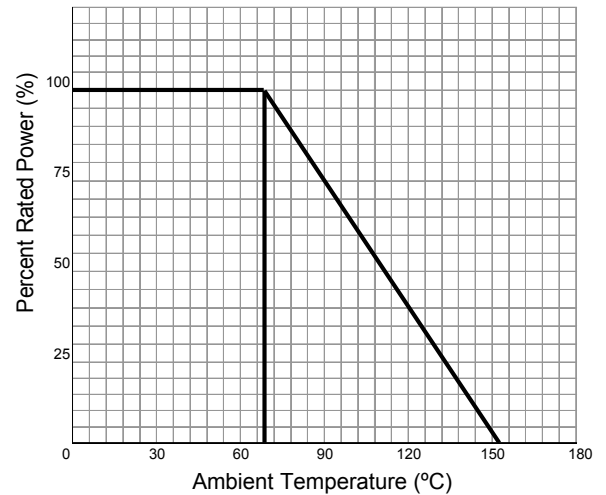
| Electrical Specifications |              |                             |                         |                          |                                    |                           |            |
|---------------------------|--------------|-----------------------------|-------------------------|--------------------------|------------------------------------|---------------------------|------------|
| Type / Code               | Package Type | Power Rating (Watts) @ 70°C | Maximum Working Voltage | Maximum Overload Voltage | Resistance Temperature Coefficient | Ohmic Range and Tolerance |            |
|                           |              |                             |                         |                          |                                    | 1%                        | 5%         |
| RHC 2512                  | 2512         | 2.0W                        | 200V                    | 400V                     | $\pm 100$ ppm/°C                   | 0.1Ω - 1MΩ                | 0.1Ω - 1MΩ |

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

| Performance Characteristics |                 |
|-----------------------------|-----------------|
| Test                        | Typical         |
| Moisture Resistance         | $\pm 1\%$       |
| Load Life                   | $\pm 1\%$       |
| Resistance to Soldering     | $\pm 1\%$       |
| Temperature Cycling         | $\pm 1\%$       |
| Thermal Shock               | $\pm 1\%$       |
| Short Time Overload         | $\pm 1\%$       |
| Insulation Resistance       | $\geq 1M\Omega$ |

Operating Temperature Range: -55°C to +155°C

Power Derating Curve



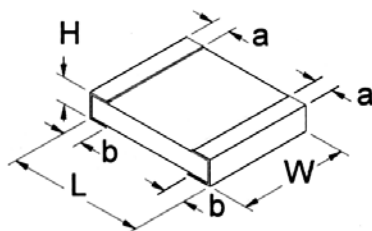
## How to Order

| SEI Type |             | Code |         | Nominal Resistance | Tolerance |        | Packaging |         |             |      |
|----------|-------------|------|---------|--------------------|-----------|--------|-----------|---------|-------------|------|
| RHC      |             | 2512 |         | 10K                | 1%        |        | R         |         |             |      |
| Type     | Description | Code | Wattage | Size               | Tolerance | Values | SEI Types | Pkg Qty | Description | Code |
| RHC      | High Power  | 2512 | 2W      | 2512               | 1%        | E24    | RHC 2512  | 4,000   | 7" - Emboss | R    |

Rev Date: 9/30/2009

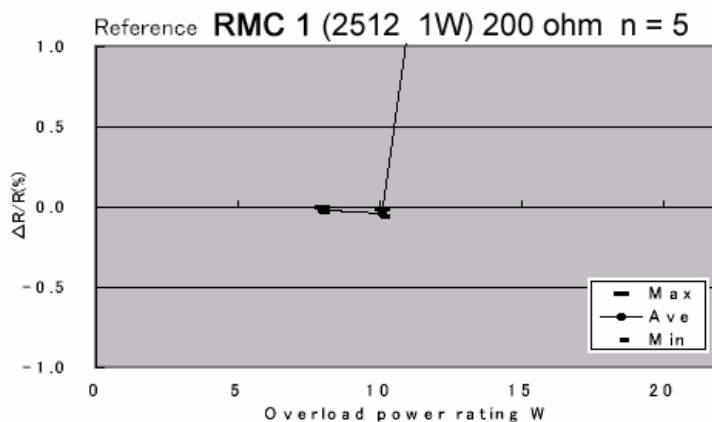
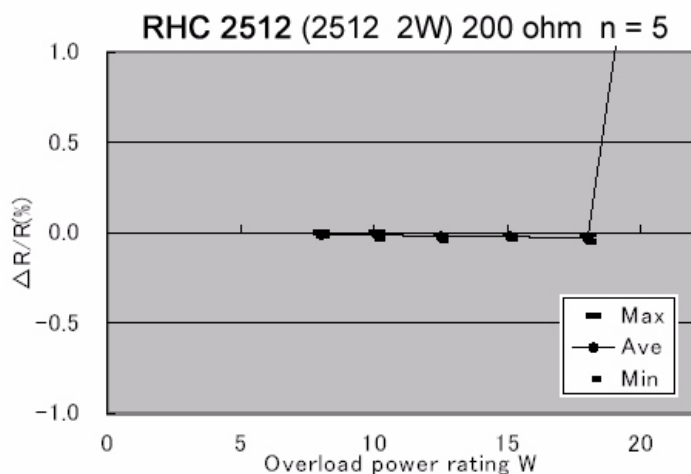
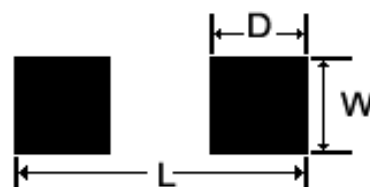
This specification may be changed at any time without prior notice  
Please confirm technical specifications before you order and/or use.

[www.seielect.com](http://www.seielect.com)  
[marketing@seielect.com](mailto:marketing@seielect.com)



| Mechanical Specifications |                   |                   |                   |                      |                         |        |
|---------------------------|-------------------|-------------------|-------------------|----------------------|-------------------------|--------|
| Type / Code               | L<br>Body Length  | W<br>Body Width   | H<br>Body Height  | a<br>Top Termination | b<br>Bottom Termination | Units  |
| RHC 2512                  | $0.248 \pm 0.008$ | $0.126 \pm 0.008$ | $0.024 \pm 0.004$ | $0.028 \pm 0.008$    | $0.087 \pm 0.008$       | inches |
|                           | $6.30 \pm 0.20$   | $3.20 \pm 0.20$   | $0.60 \pm 0.10$   | $0.70 \pm 0.20$      | $2.20 \pm 0.20$         | mm     |

| Solder Pad Dimensions |                   |                  |                |        |
|-----------------------|-------------------|------------------|----------------|--------|
| Type / Code           | L<br>Total Length | W<br>Total Width | D<br>Pad Depth | Units  |
| RHC 2512              | 0.315             | 0.138            | 0.118          | inches |
|                       | 8.00              | 3.50             | 3.00           | mm     |



Test condition

Voltage(Power): 2.0, 2.25, 2.5, 2.75, 3.0, 3.25 times of rated voltage. (8W, 10.1W, 12.5W, 15.1W, 18W, 21.1W)

Applied time : Each voltage 5sec

As a reference test, the RMC was tested with the same rated voltage and testing substrate.