



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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- Features:
- High temperature molded encapsulation
  - Flex termination for absorbing thermal expansion
  - All welded construction
  - Non-inductive winding available (contact Stackpole with requirements)
  - RoHS compliant / lead-free

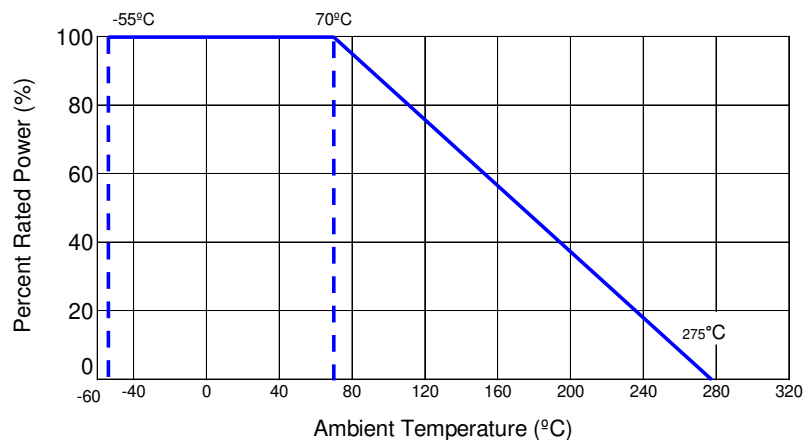


| Electrical Specifications |                             |                         |                                 |   |                               |           |            |              |
|---------------------------|-----------------------------|-------------------------|---------------------------------|---|-------------------------------|-----------|------------|--------------|
| Type / Code               | Power Rating (Watts) @ 70°C | Maximum Working Voltage | Dielectric Withstanding Voltage | Resistance Temperature Coefficient      | Ohmic Range (Ω) and Tolerance |           |            |              |
|                           |                             |                         |                                 |   | 0.1%                          | 0.5%      | 1%         | 5%           |
| SM2615                    | 1W                          | 25V                     | >500V                           | ±75 ppm/°C<br>±100 ppm/°C<br>±20 ppm/°C | -                             |           |            | 0.01 - 0.098 |
|                           |                             |                         |                                 |   | 5 - 10                        | 3 - 10    | 1 - 10     | 0.1 - 10     |
|                           |                             |                         |                                 |   | 10.1 - 400                    |           | 10.2 - 400 | 11 - 400     |
| SM4124                    | 2W                          | 50V                     | >500V                           | ±75 ppm/°C<br>±100 ppm/°C<br>±20 ppm/°C | -                             |           |            | 0.01 - 0.098 |
|                           |                             |                         |                                 |   | 5 - 10                        | 3 - 10    | 0.1 - 10   |              |
|                           |                             |                         |                                 |   | 10.1 - 1K                     |           | 10.2 - 1K  | 11 - 1K      |
| SM4527                    | 2W                          | 60V                     | >500V                           | ±75 ppm/°C<br>±100 ppm/°C<br>±20 ppm/°C | -                             |           |            | 0.01 - 0.098 |
|                           |                             |                         |                                 |   | 5 - 10                        | 3 - 10    | 0.1 - 10   |              |
|                           |                             |                         |                                 |   | 10.1 - 1K                     |           | 10.2 - 1K  | 11 - 1K      |
| SM4527...-LP              | 2W                          | 60V                     | >500V                           | ±75 ppm/°C                              | -                             |           |            | 0.01 - 0.05  |
| SMH4527                   | 3W                          | 60V                     | >500V                           | ±75 ppm/°C                              | -                             |           |            | 0.01 - 0.05  |
| SM6227                    | 3W                          | 100V                    | >500V                           | ±75 ppm/°C<br>±100 ppm/°C<br>±20 ppm/°C | -                             |           |            | 0.05 - 0.098 |
|                           |                             |                         |                                 |   | 1 - 10                        |           |            |              |
|                           |                             |                         |                                 |   | 10.1 - 3K                     | 10.2 - 3K | 11 - 3K    |              |
| SM8035                    | 4W                          | 100V                    | >500V                           | ±75 ppm/°C<br>±100 ppm/°C<br>±20 ppm/°C | -                             |           |            | 0.05 - 0.098 |
|                           |                             |                         |                                 |   | 1 - 10                        |           |            |              |
|                           |                             |                         |                                 |   | 10.1 - 5K                     | 10.2 - 5K | 11 - 5K    |              |

| Performance Characteristics     |                     |
|---------------------------------|---------------------|
| Test                            | Test Specifications |
| Moisture Resistance             | ±1%                 |
| Thermal Shock                   | ±0.5%               |
| Load Life @ 70°C - 1,000 hrs.   | ±1%                 |
| Resistance to Soldering Heat    | ±1                  |
| Terminal Strength               | ±0.5%               |
| Dielectric Withstanding Voltage | ±0.001% / V         |
| Short Time Overload             | ±0.2%               |

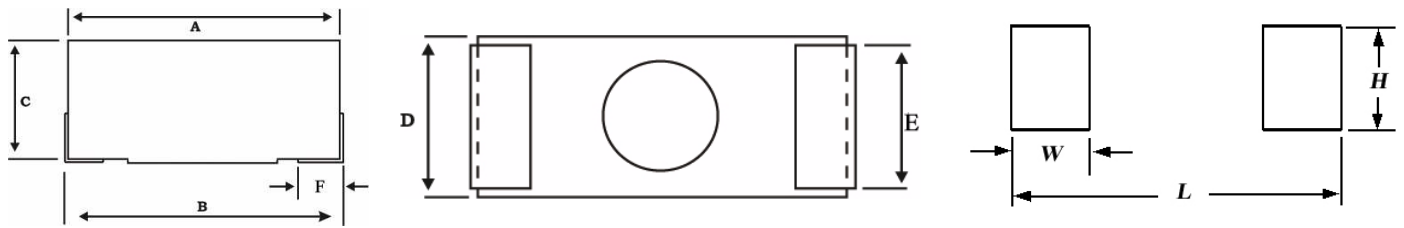
Operating Temperature Range: -55°C to +275°C

Power Derating Curve:



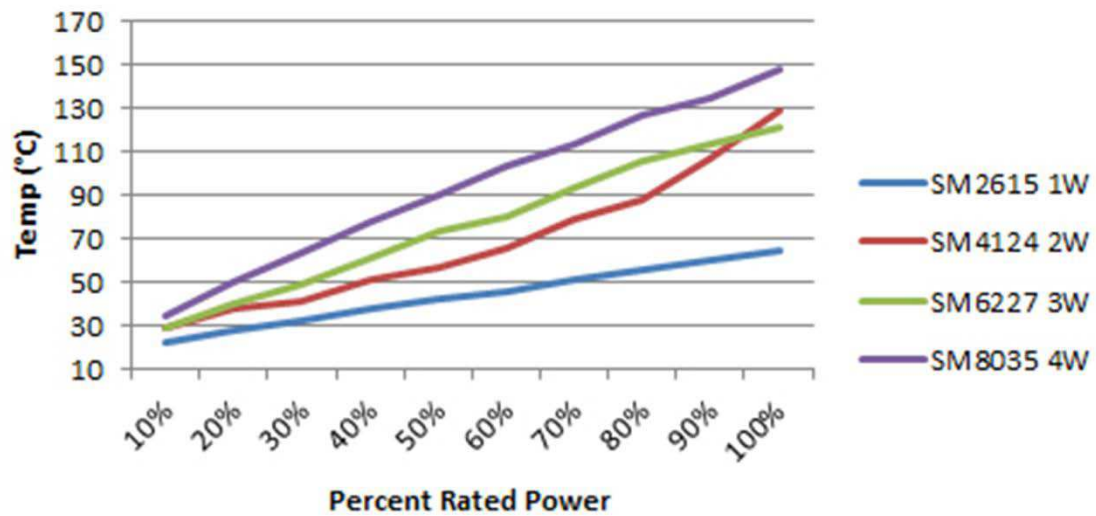


**Mechanical Specifications**



| Type / Code  | A<br>Body Length              | B<br>Total Length             | C<br>Body Height             | D<br>Body Width              | E<br>Termination Width       | F<br>Termination Length      | W             | H             | L              | Unit         |
|--------------|-------------------------------|-------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---------------|---------------|----------------|--------------|
| SM2615       | 0.260 ± 0.015<br>6.60 ± 0.38  | 0.280 ± 0.032<br>7.11 ± 0.81  | 0.140 ± 0.015<br>3.56 ± 0.38 | 0.150 ± 0.015<br>3.81 ± 0.38 | 0.100 ± 0.015<br>2.54 ± 0.38 | 0.090 ± 0.015<br>2.29 ± 0.38 | 0.138<br>3.51 | 0.130<br>3.30 | 0.350<br>8.89  | inches<br>mm |
| SM4124       | 0.410 ± 0.015<br>10.41 ± 0.38 | 0.430 ± 0.032<br>10.92 ± 0.81 | 0.180 ± 0.015<br>4.57 ± 0.38 | 0.240 ± 0.015<br>6.10 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.090 ± 0.015<br>2.29 ± 0.38 | 0.181<br>4.60 | 0.157<br>3.99 | 0.583<br>14.81 | inches<br>mm |
| SM4527       | 0.455 ± 0.015<br>11.56 ± 0.38 | 0.475 ± 0.032<br>12.07 ± 0.81 | 0.215 ± 0.015<br>5.46 ± 0.38 | 0.270 ± 0.015<br>6.86 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.105 ± 0.015<br>2.67 ± 0.38 | 0.169<br>4.29 | 0.157<br>3.99 | 0.587<br>14.91 | inches<br>mm |
| SM4527...-LP | 0.455 ± 0.015<br>11.56 ± 0.38 | 0.475 ± 0.032<br>12.07 ± 0.81 | 0.150 ± 0.015<br>3.81 ± 0.38 | 0.270 ± 0.015<br>6.86 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.105 ± 0.015<br>2.67 ± 0.38 | 0.169<br>4.29 | 0.157<br>3.99 | 0.587<br>14.91 | inches<br>mm |
| SMH4527      | 0.455 ± 0.015<br>11.56 ± 0.38 | 0.475 ± 0.032<br>12.07 ± 0.81 | 0.150 ± 0.015<br>3.81 ± 0.38 | 0.270 ± 0.015<br>6.86 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.105 ± 0.015<br>2.67 ± 0.38 | 0.169<br>4.29 | 0.157<br>3.99 | 0.587<br>14.91 | inches<br>mm |
| SM6227       | 0.625 ± 0.015<br>15.88 ± 0.38 | 0.645 ± 0.032<br>16.38 ± 0.81 | 0.250 ± 0.015<br>6.35 ± 0.38 | 0.275 ± 0.015<br>6.99 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.130 ± 0.015<br>3.30 ± 0.38 | 0.236<br>5.99 | 0.157<br>3.99 | 0.850<br>21.59 | inches<br>mm |
| SM8035       | 0.800 ± 0.015<br>20.32 ± 0.38 | 0.825 ± 0.032<br>20.96 ± 0.81 | 0.362 ± 0.015<br>9.19 ± 0.38 | 0.350 ± 0.015<br>8.89 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.122 ± 0.015<br>3.10 ± 0.38 | 0.340<br>8.64 | 0.157<br>3.99 | 0.950<br>24.13 | inches<br>mm |

**SM Series Hot Spot Temperature**



## RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union’s directive regarding “Restrictions on Hazardous Substances” (RoHS 2). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament.

| RoHS Compliance Status  |  |                            |                                |                                   |  |                                       |
|-------------------------|--|----------------------------|--------------------------------|-----------------------------------|--|---------------------------------------|
| Standard Product Series | Description  | Package / Termination Type | Standard Series RoHS Compliant | Lead-Free Termination Composition | Lead-Free Mfg. Effective Date (Std Product Series) | Lead-Free Effective Date Code (YY/WW) |
| SM                      | Surface Mount - General Purpose and Precision Wirewound Resistor | SMD                        | YES                            | 100% Matte Sn                     | Jan-06   | 06/01                                 |

## “Conflict Metals” Commitment

We at Stackpole electronics, Inc. are joined with our industry in opposing the use of metals mined in the “conflict region” of the Easter Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

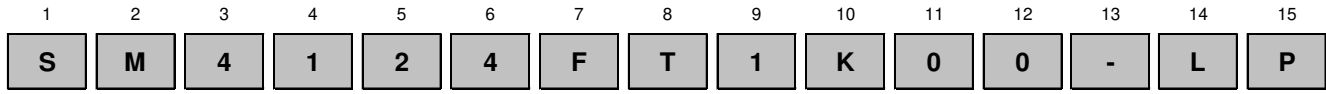
## Compliance to “REACH”

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, “The Registration, Evaluation, Authorization and Restriction of Chemicals”, otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

## Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

**How to Order**



| Product Series |               |
|----------------|---------------|
| SM             | Standard      |
| SMH            | High Power    |
| NSM            | Non-inductive |

| Size    | Power |
|---------|-------|
| 2615    | 1W    |
| 4124    | 2W    |
| 4527    | 2W    |
| (H)4527 | 3W    |
| 6227    | 3W    |
| 8035    | 4W    |

| Tolerance |      |
|-----------|------|
| Code      | Tol  |
| B         | 0.1% |
| D         | 0.5% |
| F         | 1%   |
| J         | 5%   |

| Packaging |                          |                  |          |
|-----------|--------------------------|------------------|----------|
| Code      | Description              | Size             | Quantity |
| T         | 13" Reel<br>Plastic Tape | 2615             | 1,500    |
|           |                          | 4527(-LP), H4527 | 1,200    |
|           |                          | 4527             | 900      |
|           |                          | 6227             | 750      |
|           |                          | 8035             | 350      |

| Resistance Value   |
|--|
| Four characters with the multiplier used as the decimal holder.<br>"L" used as multiplier of 10 <sup>-3</sup> for any value under 0.1 ohm.<br>0.01 ohm = 10L0<br>0.1 ohm = R100<br>1 Kohm = 1K00 |

| Special |             |
|---------|-------------|
| Code    | Description |
| (blank) | Standard    |
| -LP     | Low Profile |