# SM/SMH Series

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Surface Mount Wirewound Resistor

Resistive Product Solutions

#### 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

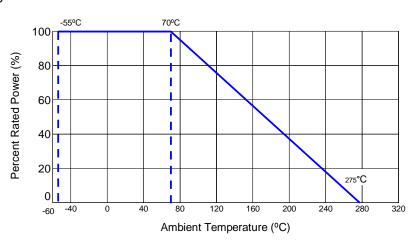


Electrical Specifications									
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage	Dielectric Withstanding Voltage	Resistance Temperature Coefficient	Ohmic Range ( $\Omega$ ) and Tolerance				
					0.1%	0.5%	1%	5%	
				±75 ppm/⁰C		-	0.01 - 0.0		
SM2615	1W	25V	>500V	±100 ppm/ºC	5 - 10	3 - 10	1 - 10	0.1 - 10	
				±20 ppm/ºC	10.1 - 400		10.2 - 400	11 - 400	
		50V	>500V	±75 ppm/ºC ±100 ppm/ºC	-		0.05 - 0.098	0.01 - 0.098	
SM4124	2W				5 - 10	5 - 10 3 - 10		0.1 - 10	
				±20 ppm/⁰C	10.1 - 1K		10.2 - 1K	11 - 1K	
	2W	60V	>500V	±75 ppm/⁰C	-		0.05 - 0.098	0.01 - 0.098	
SM4527				±100 ppm/ºC	5 - 10 3 -10		0.1 - 10		
				±20 ppm/⁰C	10.1 - 1K		10.2 - 1K	11 - 1K	
SM4527LP	2W	60V	>500V	±75 ppm/⁰C	-		0.01	0.01 - 0.05	
SMH4527	3W	60V	>500V	±75 ppm/⁰C	-		0.01	0.01 - 0.05	
	3W	100V	>500V	±75 ppm/⁰C			0.05 - 0.098		
SM6227				±100 ppm/ºC			- 10		
				±20 ppm/⁰C	10.1	- 3K	10.2 - 3K	11 - 3K	
	4W	100V	>500V	±75 ppm/⁰C	-		0.05 - 0.098		
SM8035				±100 ppm/ºC	1		- 10		
				±20 ppm/⁰C	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

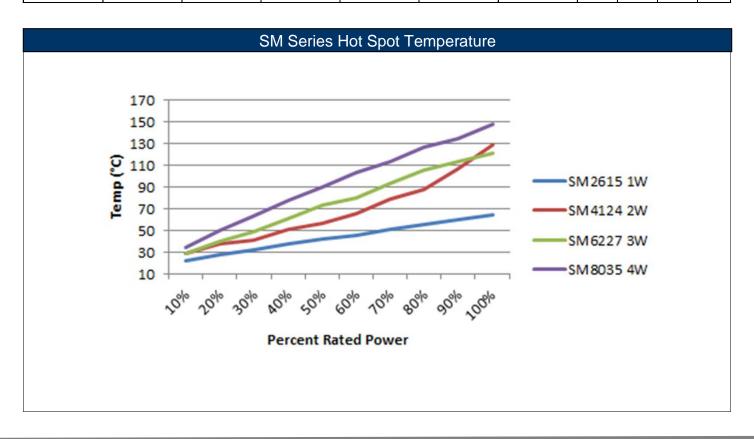
Power Derating Curve:



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Mechanical Specifications										
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Type / Code	A Body Length	B Total Length	C Body Height	D Body Width	E Termination Width	F Termination Length	W	н	L	Unit
SM2615	$0.260 \pm 0.015$	0.280 ± 0.032	0.140 ± 0.015	0.150 ± 0.015	0.100 ± 0.015	0.090 ± 0.015	0.138	0.130	0.350	inches
	$6.60 \pm 0.38$	7.11 ± 0.81	3.56 ± 0.38	3.81 ± 0.38	2.54 ± 0.38	2.29 ± 0.38	3.51	3.30	8.89	mm
SM4124	0.410 ± 0.015	0.430 ± 0.032	0.180 ± 0.015	0.240 ± 0.015	0.122 ± 0.015	0.090 ± 0.015	0.181	0.157	0.583	inches
	10.41 ± 0.38	10.92 ± 0.81	4.57 ± 0.38	6.10 ± 0.38	3.10 ± 0.38	2.29 ± 0.38	4.60	3.99	14.81	mm
SM4527	0.455 ± 0.015	0.475 ± 0.032	0.215 ± 0.015	$0.270 \pm 0.015$	0.122 ± 0.015	0.105 ± 0.015	0.169	0.157	0.587	inches
	11.56 ± 0.38	12.07 ± 0.81	5.46 ± 0.38	$6.86 \pm 0.38$	3.10 ± 0.38	2.67 ± 0.38	4.29	3.99	14.91	mm
SM4527LP	0.455 ± 0.015	0.475 ± 0.032	0.150 ± 0.015	$0.270 \pm 0.015$	0.122 ± 0.015	0.105 ± 0.015	0.169	0.157	0.587	inches
	11.56 ± 0.38	12.07 ± 0.81	3.81 ± 0.38	$6.86 \pm 0.38$	3.10 ± 0.38	2.67 ± 0.38	4.29	3.99	14.91	mm
SMH4527	0.455 ± 0.015	0.475 ± 0.032	0.150 ± 0.015	0.270 ± 0.015	0.122 ± 0.015	0.105 ± 0.015	0.169	0.157	0.587	inches
	11.56 ± 0.38	12.07 ± 0.81	3.81 ± 0.38	6.86 ± 0.38	3.10 ± 0.38	2.67 ± 0.38	4.29	3.99	14.91	mm
SM6227	0.625 ± 0.015	0.645 ± 0.032	$0.250 \pm 0.015$	$0.275 \pm 0.015$	0.122 ± 0.015	0.130 ± 0.015	0.236	0.157	0.850	inches
	15.88 ± 0.38	16.38 ± 0.81	$6.35 \pm 0.38$	$6.99 \pm 0.38$	3.10 ± 0.38	3.30 ± 0.38	5.99	3.99	21.59	mm
SM8035	$0.800 \pm 0.015$	0.825 ± 0.032	0.362 ± 0.015	0.350 ± 0.015	0.122 ± 0.015	0.122 ± 0.015	0.340	0.157	0.950	inches
	20.32 $\pm 0.38$	20.96 ± 0.81	9.19 ± 0.38	8.89 ± 0.38	3.10 ± 0.38	3.10 ± 0.38	8.64	3.99	24.13	mm



#### **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.

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Resistive Product Solutions

