

Features:

- High temperature molded encapsulation
- Flex termination for absorbing thermal expansion
- All welded construction
- Non-inductive winding available (contact Stackpole with requirements)
- 100% RoHS compliant and lead free without exemption
- Halogen free
- REACH compliant
- Size 2615 last time buy August 31, 2022 - for more information, please see our [PDN here](#)



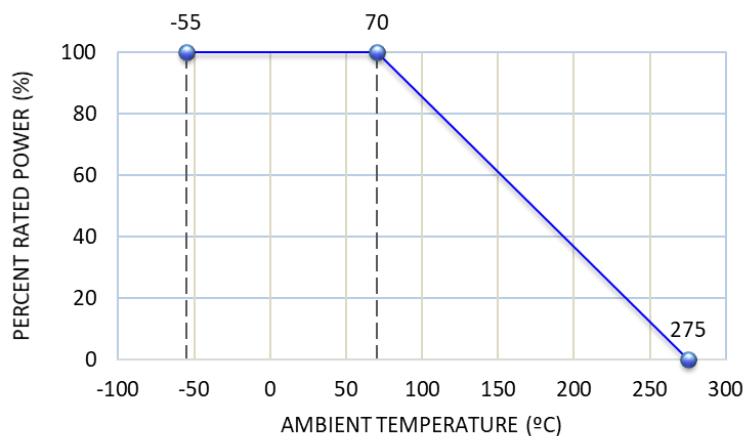
Electrical Specifications								
Type / Code	Power Rating (W) @ 70°C	Maximum Working Voltage	Dielectric Withstanding Voltage (V)	TCR (ppm/°C)	Ohmic Range (Ω) and Tolerance			
					0.1%	0.5%	1%	5%
SM2615	1	$\sqrt{P \cdot R}$	> 500	± 75	-			0.01 - 0.091
				± 100	5 - 10	3 - 10	1 - 10	0.1 - 10
				± 20	10.1 - 400		10.2 - 400	11 - 400
SM4124	2			± 75	-		0.051 - 0.098	0.01 - 0.091
				± 100	5 - 10	3 - 10	0.1 - 10	
				± 20	10.1 - 1 K		10.2 - 1 K	11 - 1 K
SM4527	2			± 75	-		0.051- 0091	0.01 - 0.091
				± 100	5 - 10	3 -10	0.1 - 10	
				± 20	10.1 - 1 K		10.2 - 1 K	11 - 1 K
SM4527...-LP	2			± 75	-		0.01 - 0.05	
SMH4527	3			± 75	-		0.01 - 0.05	
SM6227	3			± 75	-		0.051 - 0.091	
				± 100	0.1 - 10			
				± 20	10.1 - 3 K		10.2 - 3 K	11 - 3 K
				± 75	-		0.051 - 0.091	
SM8035	4			± 100	0.1 - 10			
				± 20	10.1 - 5 K		10.2 - 5 K	11 - 5 K

Mechanical Specifications										
Type / Code	A Body Length	B Total Length	C Body Height	D Body Width	E Termination Width	F Termination Length	W	H	L	Unit
SM2615	0.260 ± 0.015 6.60 ± 0.38	0.280 ± 0.032 7.11 ± 0.81	0.140 ± 0.015 3.56 ± 0.38	0.150 ± 0.015 3.81 ± 0.38	0.100 ± 0.015 2.54 ± 0.38	0.090 ± 0.015 2.29 ± 0.38	0.138 3.51	0.130 3.30	0.350 8.89	inches mm
SM4124	0.410 ± 0.015 10.41 ± 0.38	0.430 ± 0.032 10.92 ± 0.81	0.180 ± 0.015 4.57 ± 0.38	0.240 ± 0.015 6.10 ± 0.38	0.122 ± 0.015 3.10 ± 0.38	0.090 ± 0.015 2.29 ± 0.38	0.181 4.60	0.157 3.99	0.583 14.81	inches mm
SM4527	0.455 ± 0.015 11.56 ± 0.38	0.475 ± 0.032 12.07 ± 0.81	0.215 ± 0.015 5.46 ± 0.38	0.270 ± 0.015 6.86 ± 0.38	0.122 ± 0.015 3.10 ± 0.38	0.105 ± 0.015 2.67 ± 0.38	0.169 4.29	0.157 3.99	0.587 14.91	inches mm
SM4527...-LP	0.455 ± 0.015 11.56 ± 0.38	0.475 ± 0.032 12.07 ± 0.81	0.150 ± 0.015 3.81 ± 0.38	0.270 ± 0.015 6.86 ± 0.38	0.122 ± 0.015 3.10 ± 0.38	0.105 ± 0.015 2.67 ± 0.38	0.169 4.29	0.157 3.99	0.587 14.91	inches mm
SMH4527	0.455 ± 0.015 11.56 ± 0.38	0.475 ± 0.032 12.07 ± 0.81	0.150 ± 0.015 3.81 ± 0.38	0.270 ± 0.015 6.86 ± 0.38	0.122 ± 0.015 3.10 ± 0.38	0.105 ± 0.015 2.67 ± 0.38	0.169 4.29	0.157 3.99	0.587 14.91	inches mm
SM6227	0.625 ± 0.015 15.88 ± 0.38	0.645 ± 0.032 16.38 ± 0.81	0.250 ± 0.015 6.35 ± 0.38	0.275 ± 0.015 6.99 ± 0.38	0.122 ± 0.015 3.10 ± 0.38	0.130 ± 0.015 3.30 ± 0.38	0.236 5.99	0.157 3.99	0.850 21.59	inches mm
SM8035	0.800 ± 0.015 20.32 ± 0.38	0.830 ± 0.032 21.08 ± 0.81	0.370 ± 0.015 9.40 ± 0.38	0.350 ± 0.015 8.89 ± 0.38	0.115 ± 0.015 2.92 ± 0.38	0.165 ± 0.015 4.19 ± 0.38	0.340 8.64	0.157 3.99	0.950 24.13	inches mm

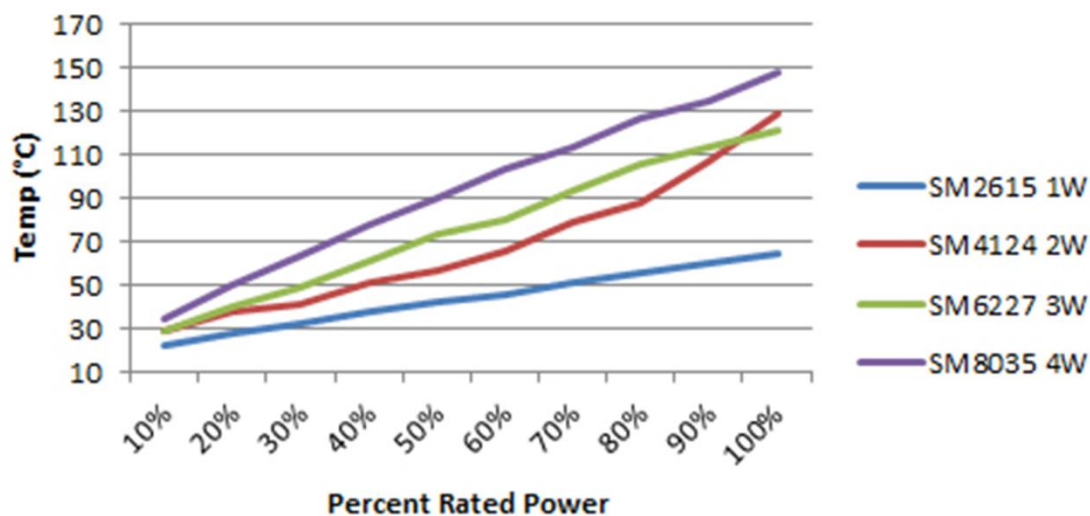
Performance Characteristics	
Test	Test Specification
Moisture Resistance	± 1%
Thermal Shock	± 0.5%
Load Life @ 70°C - 1000 hours	± 1%
Resistance to Soldering Heat	± 1%
Terminal Strength	± 0.5%
Dielectric Withstanding Voltage	± 0.001% / V
Short Time Overload	± 0.2%

Operating temperature range is -55°C to +275°C

Power Derating Curve:



SM Series Hot Spot Temperature



Recommended Solder Profile

This information is intended as a reference for solder profiles for Stackpole resistive components. These profiles should be compatible with most soldering processes. These are only recommendations. Actual numbers will depend on board density, geometry, packages used, etc., especially those cells labeled with “*”.

100% Matte Tin / RoHS Compliant Terminations

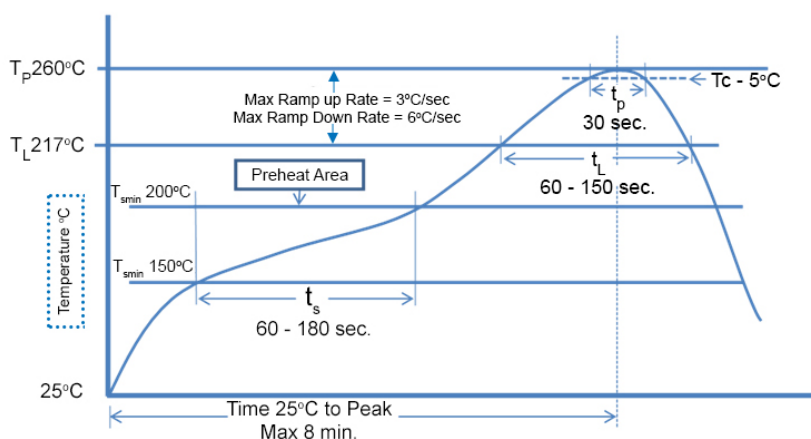
Soldering iron recommended temperatures: 330°C to 350°C with minimum duration.
Maximum number of reflow cycles: 3.

Wave Soldering			
Description	Maximum	Recommended	Minimum
Preheat Time	80 seconds	70 seconds	60 seconds
Temperature Diff.	140°C	120°C	100°C
Solder Temp.	260°C	250°C	240°C
Dwell Time at Max.	10 seconds	5 seconds	*
Ramp DN (°C/sec)	N/A	N/A	N/A

Temperature Diff. = Difference between final preheat stage and soldering stage.

Convection IR Reflow			
Description	Maximum	Recommended	Minimum
Ramp Up (°C/sec)	3°C/sec	2°C/sec	*
Dwell Time > 217°C	150 seconds	90 seconds	60 seconds
Solder Temp.	260°C	245°C	*
Dwell Time at Max.	30 seconds	15 seconds	10 seconds
Ramp DN (°C/sec)	6°C/sec	3°C/sec	*

Recommended Lead Free Resistor Reflow Profile



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 3). 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 as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

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 eastern 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

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S	M	4	1	2	4	F	T	1	K	0	0	-	L	P
Product Series		Power Rating		Tolerance		Packaging				Resistance Value			Special	
Code	Description	Size	W	Code	Tol	Code	Description	Size	Quantity	Four characters with the multiplier used as the decimal holder. "L" used as multiplier of 10 ⁻³ for any value under 0.1 ohm. 0.01 ohm = 10L0 0.1 ohm = R100 1 Kohm = 1K00			Code	Description
SM	Standard	2615	1	B	0.1%	T	13" Reel Plastic Tape	2615	1500				blank	Standard
SMH	High Power	4124	2	D	0.5%			4527(-LP), H4527	1200				-LP	Low Profile
NSM	Non-inductive	4527	2	F	1%			4527	900					
		(H)4527	3	J	5%			4124	800					
		6227	3					6227	750					
		8035	4					8035	350					