

# SM/SMX Series — Surface Mount - Wirewound/ Film

## Features

### SM - Wirewound Element

- High temperature molded encapsulation
- Flex termination for absorbing thermal expansion
- All welded construction
- Available in non-inductive styles

### SMX - Metal Oxide Element

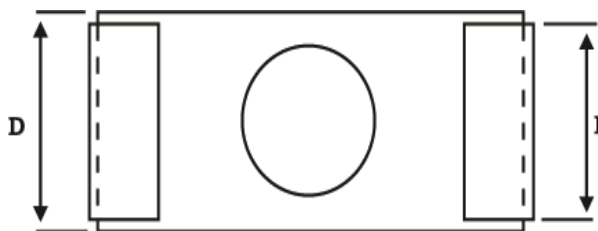
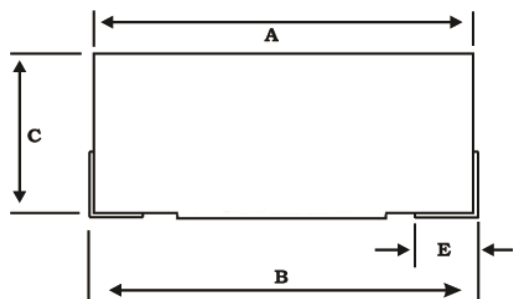
- SMX: economical SMT 2 and 3 watt
- SMX extends value range up to 470K
- Both are RoHS compliant/ lead-free



## Electrical Specifications

Type	Power Rating (Watts) @ 70°C	Maximum Working Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance		
				0.1% & 0.5%	1%	5%
SM 1	1W	25	±100 ppm/°C ± 20 ppm/°C	0.01Ω – 10Ω* 10Ω – 1K	0.01Ω – 10Ω* 10Ω – 1K	0.01Ω – 10Ω* 10Ω – 1K
SM 2	2W	50	±100 ppm/°C ± 20 ppm/°C	0.01Ω – 10Ω* 10Ω – 2K	0.01Ω – 10Ω* 10Ω – 2K	0.01Ω – 10Ω* 10Ω – 2K
SMX 2	2W	350	±200 ppm/°C	–	2.0K – 100K	2.0K – 470K
SM 2A	2W	60	±100 ppm/°C	0.005Ω – 0.976Ω*	0.005Ω – 0.976Ω*	0.005Ω – 0.976Ω*
SM 3	3W	100	±100 ppm/°C ± 20 ppm/°C	0.01Ω – 10Ω* 10Ω – 3.01K	0.01Ω – 10Ω* 10Ω – 3.01K	0.01Ω – 10Ω* 10Ω – 3.01K
SMX 3	3W	500	±200 ppm/°C	–	3.01K – 118K	3.01K – 470K

\* Zero ohm available on all sizes .



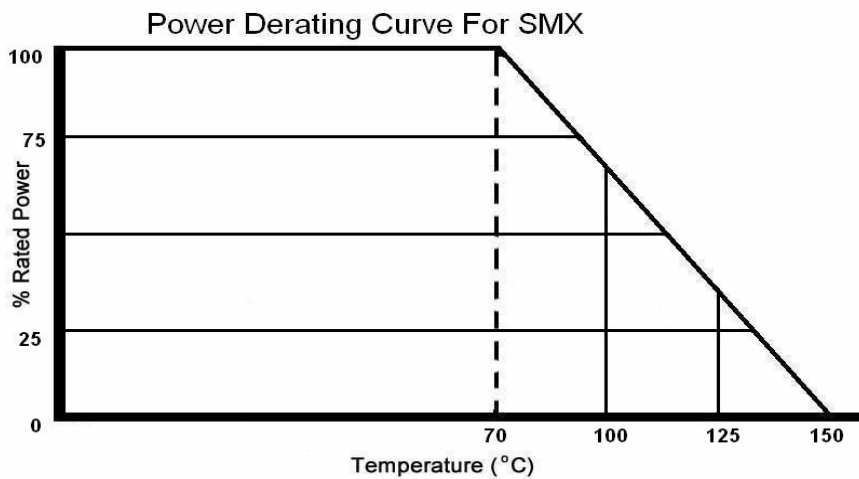
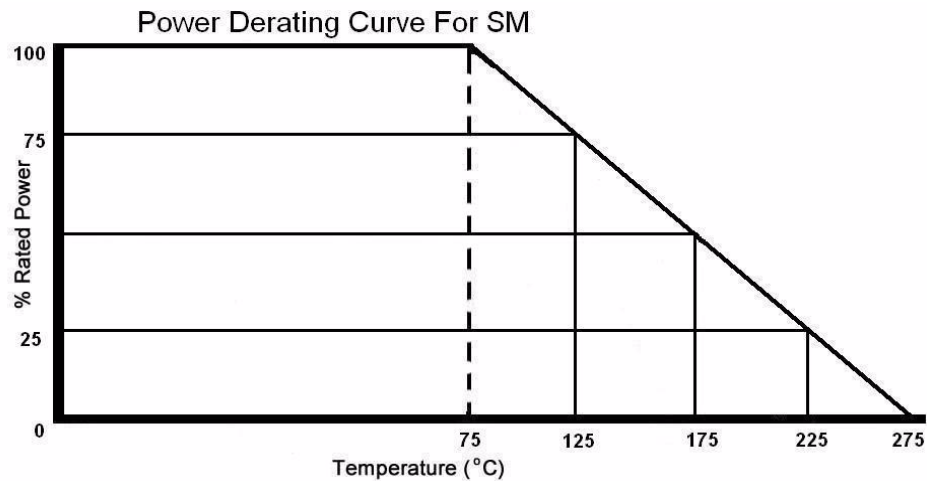
## Mechanical Specifications

Type	A Body Length	B Total Length	C Body Height	D Body Width	E Termination Width	F Termination Length	Units
Tolerance	±0.015	±0.032	±0.015	±0.015	±0.015	±0.015	
	±0.4	±0.81	±0.4	±0.4	±0.4	±0.4	
SM 1	0.260 6.6	0.280 7.1	0.140 3.6	0.150 3.8	0.090 2.3	0.100 2.5	inches mm
SM/ SMX 2	0.410 10.4	0.435 11.1	0.180 4.6	0.240 6.1	0.100 2.5	0.115 2.9	inches mm
SM 2A	0.475 12.1	0.500 12.7	0.140 3.6	0.305 7.8	0.110 2.8	0.115 2.9	inches mm
SM/ SMX 3	0.629 16.0	0.708 18.0	0.256 6.5	0.276 7.0	0.110 2.8	0.115 2.9	inches mm

## How to Order

SM		2		1K		1%		R	
SEI Type		Code		Nominal Resistance		Tolerance		Packaging	
Type	Element	Code	Size	Tolerance	Series	Code	Description	Pkg Qty	
SM	Wirewound	1	2815	0.1%	SM 1	R	13" Reel	1,500	
SMX	Metal Oxide	2	4424	0.5%	SM 2, SMX 2	R	13" Reel	800	
		2A	5031	1%	SM 2A	R	13" Reel	1,200	
		3	7128	5%	SM 3, SMX 3	R	13" Reel	750	

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## Performance Characteristics

Test	SM Test Results	SMX Test Results
Moisture Resistance	±1.0%	±1.5%
Thermal Shock	± 0.5%	±1.0%
Load Life @70°C – 1,000 hrs.	±1.0%	±5.0%
Shock and Vibration	±1.0%	±1.0%
Resistance to Soldering Heat	±1.0	±1.0
Terminal Strength	±0.5%	±0.5%
Dielectric Withstanding Voltage	±0.001%/V	±0.001%/V
Short Time Overload	±0.5%	±0.75%
Low Temperature Operation	±0.5%	±0.5%
Operating Temperature Range	-55°C to +275°C	-55°C to +155°C