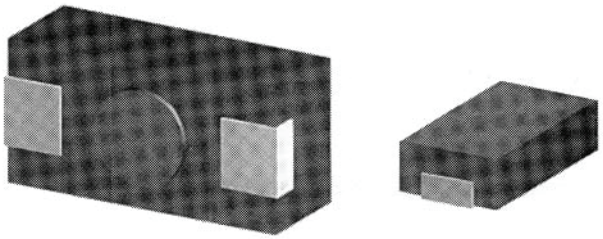
SM, SML

SPECIFICATIONS

- Resistance: 0.005 to 50,000 Ohms
- High Power - to 4 Watts
- Resistance Tolerance to ±0.005%
- Low Temperature Coefficient
- Superior Surge Handling Capability
- High Temperature Molded Construction
- Reel Packaging in Embossed Carrier Tape
- 100% Acceptance Tested, Traceable to NIST

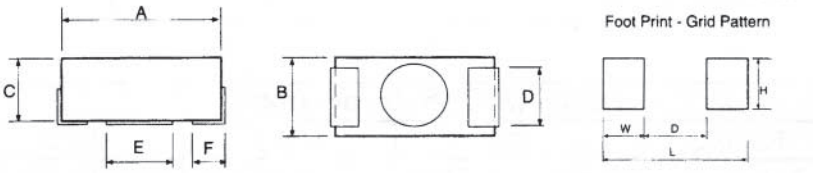


SML and SM power resistors serve today's expanding usage of surface mounted circuitry. The SML Series is for low resistance requirements from 0.005 to 1 ohm. This low-profile design uses a welded strip metal resistance element with very low inductance (0.5nH to 5nH) and low thermal emf. The SM Series uses a welded wirewound element for higher resistance applications to 50K ohms.

DIMENSIONS

Type	Resistance (OHMS)	Power WATTS	A max	B max	C max	Lead Thick[1]	D[2]	Stand-Off E	Stand-Off Ht.	F[3]	Footprint3 W	Footprint3 H	Footprint3 D	Footprint3 L
SM 1	0.01 to 400	0.5	0.210	0.130	0.110	0.006	0.060	0.100	0.005	0.040	0.062	0.100	0.125	0.250
SM 2	0.01 to 1K	1.0	0.275	0.150	0.130	0.006	0.070	0.120	0.005	0.070	0.096	0.112	0.145	0.337
SM 4	0.01 to 15K	2.0	0.475	0.250	0.180	0.006	0.120	0.190	0.005	0.100	0.155	0.230	0.230	0.540
SM 5	0.01 to 50K	4.0	0.820	0.295	0.280	0.006	0.150	0.245	0.005	0.190	0.220	0.250	0.460	0.900
SML 2	0.005 to 0.1	1	0.275	0.150	0.100	0.006	0.070	0.120	0.005	0.070	0.096	0.112	0.145	0.337
SML 4	0.005 to 0.1	2	0.475	0.250	0.100	0.006	0.120	0.190	0.005	0.100	0.155	0.230	0.230	0.540

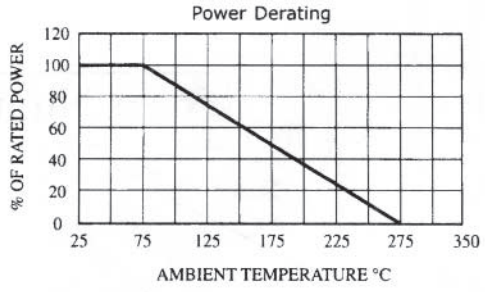
Dimension are in inches.
Tolerance: [1] ± 0.003 [2] ± 0.020 [3] ± 0.010



Temperature Coefficient or Resistance (ppm/°C):	**SML:**±120, **SM:** <1Ω:±90; 1 to 10Ω:±50; >10Ω:±20
Standard Resistance Tolerances:	**SML:** ±0.1% to ±5%, **SM:** ±0.01% to ±5%
	(Other tolerances are available.)
Operating Temperature:	-55° C to +275°C
Reel/Tape Width (mm):	**SML 2:** 16, **SML 4:** 24, **SM 1:** 12, **SM 2:** 16, **SM 4:** 24, **SM 5:** 32

Environmental Specifications: (MIL-STD 202)

	% Max. Resistance Change
Load Life at Rated Wattage	1
Moisture Resistance	1
Temperature Cycle (-40°C to +125°C)	0.5
Short Time Overload (5X rated wattage for 5 Sec.)	0.5
Low Temperature Storage	0.5
Solder Heat	0.25
Shock	0.5
Vibration	0.5



Options: Four-wire Kelvin terminations, special markings, special temperature coefficients to +6000 ppm°C, 100 hour burn-in per Mil-Stds, non-inductive Aryton-Perry windings for SM 1, SM 2, SM 4 and SM 5.

Part Numbering System

SML 4	XXX or	F
Product Type	Resistance Value	Tolerance