

SL

Silicone Rubber Insulated Flexible Heater



- SL-N General Purpose Heaters
- SL-B Enclosure Heaters
- Flexible in Design and Application
- UL and CSA Recognized Components
- Square, Rectangular, Round and Custom Shapes
 - Max. size of a single piece: 36" Wide x 120" Long
 - Can join sections into longer length
- Up to 600 Volt
- Silicone Rubber Material Temp. Range -80°F to 390°F
- Myriad of Mounting Methods
- Standard Thickness Ranges from 0.030" to 0.060" Except at Lead Pad Which is 0.15" Thick Depending on Design.
- Standard Resistance Tolerance is -10% +5%.

Description

Chromalox SL Silicone Rubber Insulated Heaters provide the greatest flexibility in meeting your application requirements. Ruggedness, dimensional stability, flexibility, and superior weather survivability are all characteristics of reinforced silicone rubber heaters. The thin profile and direct contact of the heaters provide fast, efficient heat transfer to your part and require less power than traditional heating methods.

Features

- Standard Heaters are available or made to order to exact electrical and contour specifications.
- Silicone Rubber can operate from -80°F to 390°F
- Silicone Rubber Material is UL Recognized for watt densities of:
 - 5 W/In² in open air
 - 10 W/In² attached with factory supplied PSA
 - 15 W/In² vulcanized to metal part.
- Up to 40 W/In² possible with proper temperature control.
- Fast heat-up and cool down.
- Wide choice of electrical termination: Solderless connectors and terminals, stranded lead wires, cords and plugs.
- Distributed wattage requirements can be met by design.

Note — With flexible heaters, less wattage is generally needed due to the direct contact of the elements to the part. In most cases of high watt density, you are adding power but

increasing the number of cycles the heater is going to experience. The same heat-up requirements can be met by decreasing wattage and increasing actual operation time. In addition, by decreasing on-off cycles, you will be lengthening the life of your element.

Ordering Information

Please refer to the matrix provided on the Flexible Heater Ordering Guidelines page which follows.

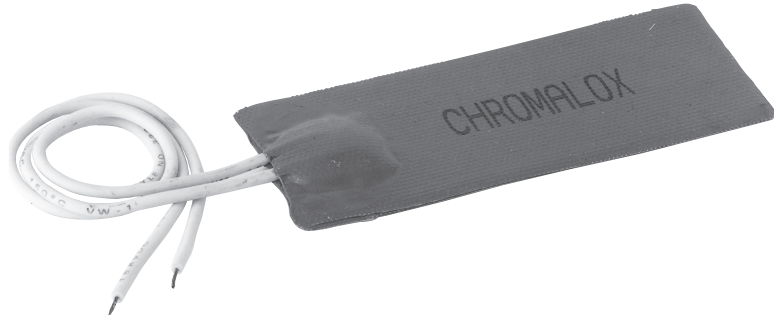
Options

- For Mounting Methods, Temperature Control and Termination Options. Consult the Flexible Heaters section.
- Grounding of the heating element can be easily achieved internally to the element or externally to your equipment. A wire-mesh screen can be vulcanized into the heater to provide a ground plane. Mounting plates, foil backing or flying ground wires are several options available for external grounding.
- Three methods of integral insulation can be provided. The most durable and one of greatest thermal insulation is to vulcanize a layer of silicone foam to the back of the heater. Silicone foam is available in thicknesses of 1/8, 1/4 or 1/2". Finally, Fiberglas® insulation can be encased in silicone rubber and serve as the outer two layers of the heating element. This method is not recommended for outdoor use since construction methods allow for moisture to permeate the insulation.



SL-N Silicone Rubber Insulated General Purpose Heater

- Standard Pre-Designed Sizes and Ratings
- Most Models Stocked
- Square, Rectangular and Round Shapes
- Chemical and Moisture Resistant
- 10" Leads
- Flexible
- Standard 1" Square to 12" W x 48" L in 120 Volts
- Custom Designed Models Available



Description

Standard Chromalox Silicone Rubber heaters are pre-designed and available in a wide array of sizes and ratings to meet customer needs. Some models are stocked and can be shipped within 24 hours from receipt of your order. All standard models incorporate 10" silicone insulated stranded lead wire. Stocked items can be modified to include pressure sensitive adhesive but, will require additional lead time.

- Standard Thickness Ranges from 0.030" to 0.060" except at Lead Pad which is 0.15" Thick Depending on Design.
- Standard Resistance Tolerance is +10%, -5%.
- Silicon Rubber Material Temperature Range -80°F to +390°F

Specifications and Ordering Information

Watts	Volts	DIM (In.)		Model	Stock	PCN
		Width	Length			
25	120	1	5	SL-N-1-5-O-10-120V-25W	S	121515
50	120	1	10	SL-N-1-10-O-10-120V-50W	S	121523
100	120	1	20	SL-N-1-20-O-10-120V-100W	S	121540
150	120	1	30	SL-N-1-30-O-10-120V-150W	S	121566
200	120	1	40	SL-N-1-40-O-10-120V-200W	S	121582
400	120	1	80	SL-N-1-80-O-10-120V-400W	S	121590
20	120	2	2	SL-N-2-2-O-10-120V-20W	S	121611
50	120	2	5	SL-N-2-5-O-10-120V-50W	S	121620
100	120	2	10	SL-N-2-10-O-10-120V-100W	S	121638
150	120	2	15	SL-N-2-15-O-10-120V-150W	S	121646
200	120	2	20	SL-N-2-20-O-10-120V-200W	S	121654
200	240	2	20	SL-N-2-20-O-10-240V-200W	S	121662
75	120	3	5	SL-N-3-5-O-10-120V-75W	S	121726
150	120	3	10	SL-N-3-10-O-10-120V-150W	S	121734
225	120	3	15	SL-N-3-15-O-10-120V-225W	S	121742
300	120	3	20	SL-N-3-20-O-10-120V-300W	S	121769
300	240	3	20	SL-N-3-20-O-10-240V-300W	S	121777
375	120	3	25	SL-N-3-25-O-10-120V-375W	S	121785
600	120	3	40	SL-N-3-40-O-10-120V-600W	S	121814
200	120	4	10	SL-N-4-10-O-10-120V-200W	S	121822
250	120	5	10	SL-N-5-10-O-10-120V-250W	S	121849
375	120	5	15	SL-N-5-15-O-10-120V-375W	S	121857
500	120	5	20	SL-N-5-20-O-10-120V-500W	S	121865
450	120	6	15	SL-N-6-15-O-10-120V-450W	S	121873
600	120	6	20	SL-N-6-20-O-10-120V-600W	S	121881

Stock Status: S = stock NS = non-stock
To Order—Specify model, PCN and quantity.

Note — All supplied with standard 10" leads.