Features

- Miniature Thermal Cutoff (TCO) device
- Surface mount, smallest body size
- Overtemperature and overcurrent protection
- Controls abnormal, excessive current virtually instantaneously, up to rated limits
- Wide range of temperature options
- High corrosion resistance
- Two height options: low profile & high force withstand

Applications

- Battery cell protection for:
  - Notebook PCs
  - Tablet PCs
  - Smart phones
- Overtemperature protection for:
  - USB Type C cables (e.g. smart phone cables, notebook AC adapters)
  - Electronic cigarettes
  - Medical heaters***

SC Series Breaker (Surface Mount Thermal Cutoff Device)

Ratings

Specification	A-TYPE			
	SC72AAA, SC72AAB	SC77AAA, SC77AAB	SC82AAA, SC82AAB	SC85AAA, SC85AAB
Trip Temperature	72 °C ± 5 °C	77 °C ± 5 °C	82 °C ± 5 °C	85 °C ± 5 °C
Reset Temperature	40 °C min.			
Contact Rating	DC9 V / 25 A, 6000 cycles			
Maximum Breaking Current	DC5 V / 50 A, 100 cycles			
Maximum Voltage	DC28 V / 25 A, 100 cycles			
Minimum Holding Voltage	3 V @ 25 °C for 1 minute			
Maximum Leakage Current	200 mA max. @ 25 °C			
Resistance	5 milliohms max.			

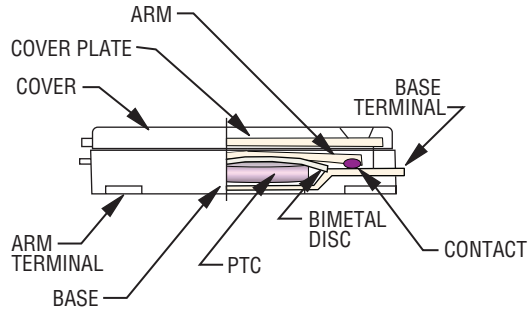
Mini-breaker TCOs reset when the following conditions are met:

- The ambient temperature has dropped by 10 °C below the minimum trip temperature; and
- Power to the TCO has been cycled (off/on)

Agency Recognition

Description	
UL, cUL	File Number: E215638 *(UL 60730)*
TUV	File Number: R 50411018 0001~0002 *(EN 60730 2-9-2010)*

Product Structure



- Model SCxAAB is the low profile 0.94 mm height version.
- Model SCxAAA is designed with a reinforced cover to withstand higher forces during the USB cable manufacturing injection molding process.

How to Order

SC 77 A A B

Series Designator

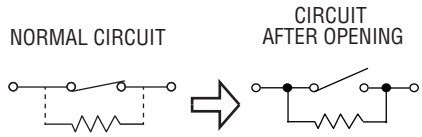
Trip Temperature (±5 °C)
- 72
- 77
- 82
- 85

Arm Material
A = Cu Alloy, High current type

Body Material
A = PPS

Body Thickness
A = 1.07 ± 0.05 mm
B = 0.94 ± 0.05 mm

Circuit Diagram



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

*** Excluding life-saving, life-critical or life-sustaining applications.

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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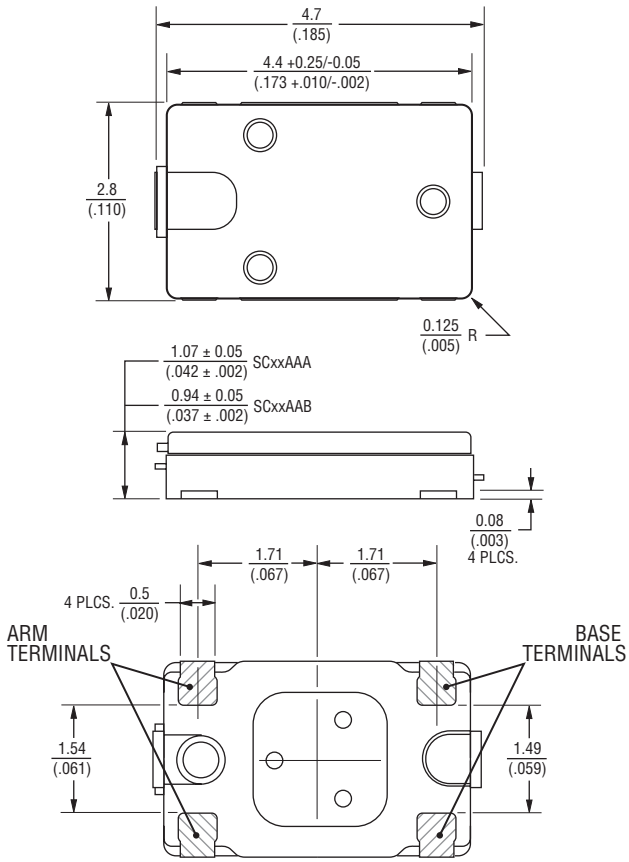
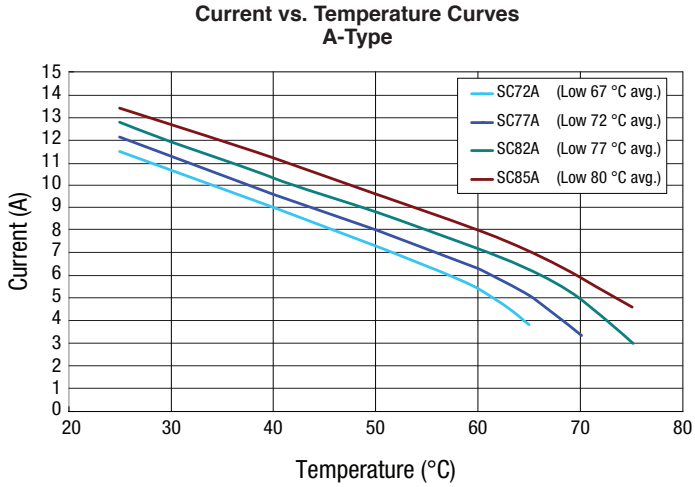
Product Dimensions



DIMENSIONS: MM / (INCHES)

Typical Performance



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