## Features

- Formerly a **KOMATSULITE**™ product
- Miniature Thermal Cutoff (TCO) device
- Surface mount
- Overtemperature and overcurrent protection for lithium polymer and prismatic cells
- Controls abnormal, excessive current virtually instantaneously, up to rated limits
- Wide range of temperature options

## Applications

Battery cell protection for:

- Notebook PCs
- Tablet PCs
- Smart phones
- USB cable protection for smart phones

# SA Series Breaker (Surface Mount Thermal Cutoff Device)

## Ratings

| Specification | C-TYPE | | | |
|---|---|---|---|---|
| | SA72CB0 | SA77CB0 | SA82CB0 | SA85CB0 |
| 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 / 12 A, 6000 cycles | | | |
| Maximum Breaking Current | DC5 V / 30 A, 100 cycles | | | |
| Maximum Voltage | DC28 V / 12 A, 100 cycles | | | |
| Minimum Holding Voltage | 3 V @ 25 °C for 1 minute | | | |
| Maximum Leakage Current | 200 mA max. @ 25 °C | | | |
| Resistance | 15 milliohms max. | | | |

| Specification | S-TYPE | | | |
|---|---|---|---|---|
| | SA72SB0 | SA77SB0 | SA82SB0 | SA85SB0 |
| 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 / 60 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 | 7 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
- Power to the TCO has been cycled (off/on)

## Agency Recognition

| Description | |
|---|---|
| UL, cUL | File Number: E215638 *(UL 60730)* |
| TUV | File Number: E50373669 *(EN60730-2-9)* |

## How to Order

**SA 77 S B 0**

- Series Designator
- Trip Temperature (±5 °C)
  - 72
  - 77
  - 82
  - 85
- Arm Material
  - C = Cu Alloy Low Current Type
  - S = Cu Alloy High Current Type
- Terminal Type
  - B = 4 Terminals (Terminal Length 1.3 mm)
- Special Specification Code
  - Resin Type, Mfg. Internal Code, Design Mark, etc.

BOURNS®

**Asia-Pacific:**
Tel: +886-2 2562-4117
Email: asiacus@bourns.com

**Europe:**
Tel: +36 88 520 390
Email: eurocus@bourns.com

**The Americas:**
Tel: +1-951 781-5500
Email: americus@bourns.com

**www.bourns.com**

**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.

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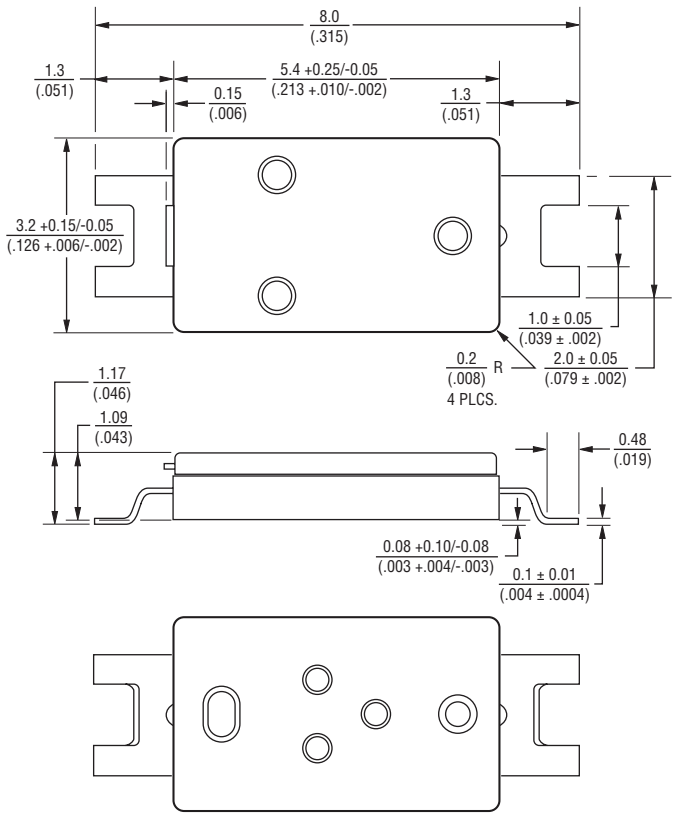
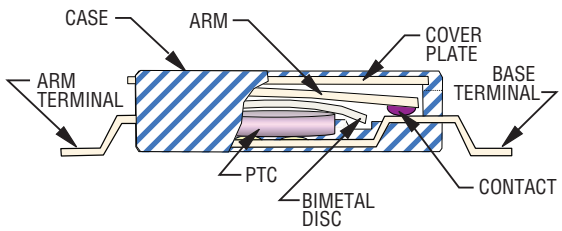
## Product Dimensions

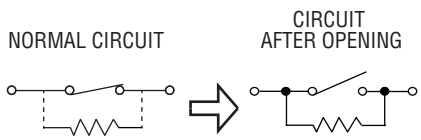



DIMENSIONS: MM / (INCHES)

## Product Structure




## Circuit Diagram

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