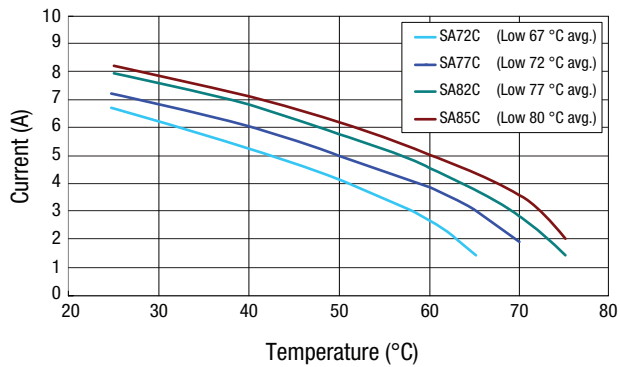
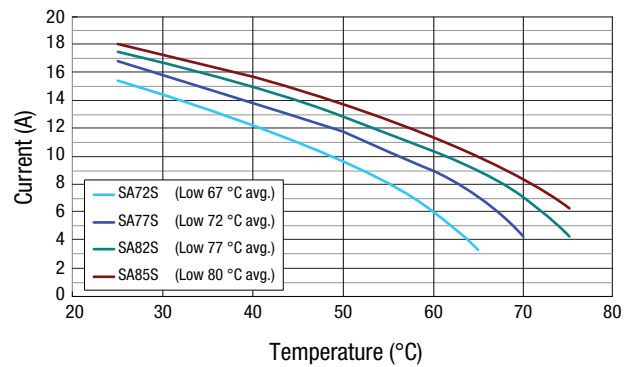


## Typical Performance

Current vs. Temperature Curves  
C-Type



Current vs. Temperature Curves  
S-Type



The above curves were derived from placing non-PCB mounted test samples in an oven at 25 °C, 40 °C, 60 °C, and 70 °C, increasing current flow through the sample at a rate of 0.1 A/minute and recording the current value when the sample trips. The current carrying performance is influenced by the PCB design due to copper resistance; users should verify actual device performance in their specific applications.

# SA Series Breaker (Surface Mount Thermal Cutoff Device)

**BOURNS®**

## Surface Mount Recommendations

The Model SA Series breaker is designed for reflow and hand soldering. It is not designed or warranted for flow soldering. The following conditions must be adhered to:

### Reflow Soldering:

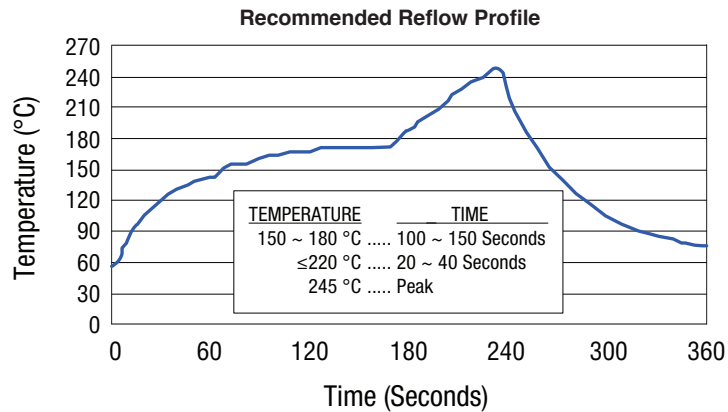
The recommended reflow soldering conditions are as follows:

150 ~ 180 °C .....	100 ~ 150 seconds
≤220 °C.....	20 ~ 40 seconds
255 ~ 260 °C .....	5 ~ 10 seconds

Process breaker in a reflow furnace using the profile shown above three times, followed by positioning the breaker in ambient temperature of +25 °C for 8 hours.

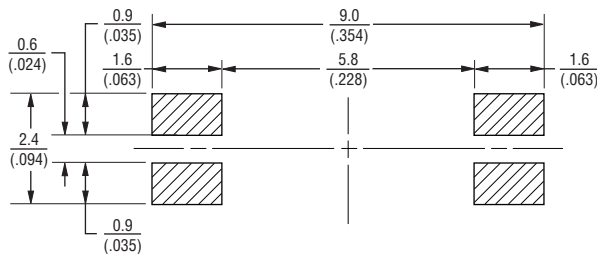
### Hand Soldering:

Place a solder iron on each of the terminal ends for 5 seconds at +350 °C, followed by positioning the breaker in ambient temperature of +25 °C for 8 hours.



**Do not expose the breaker to temperatures exceeding +260 °C.**

## Recommended Land Pattern



Recommended Mask Thickness: 0.12 mm

Recommended Solder Particle Size: 30 μm

DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

## Mounting Cautions

In order to protect the housing and mechanical parts inside from deformation, prevent excessive load at the time of part absorption / part deployment and mounting. A part absorption nozzle more than 2 mm in diameter with a 3 N (5 N max.) mounting load is recommended. Any shock to the product by the nozzle during the mounting procedure may have a negative influence on the function of the breaker.