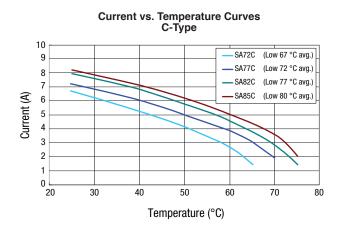
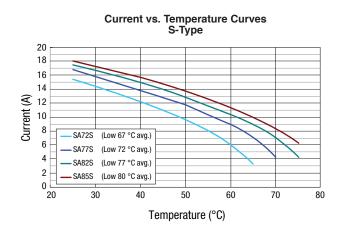
# **SA Series Breaker** (Surface Mount Thermal Cutoff Device)

# **BOURNS**®

# **Typical Performance**





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.

#### **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:

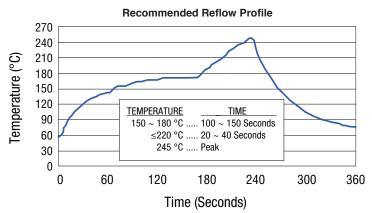
#### Reflow Soldering:

The recommended reflow soldering conditions are as follows:

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.

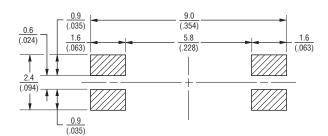
### Hand Soldering:

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

# **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.