

SC Series Breaker (Surface Mount Thermal Cutoff Device)

BOURNS®

Surface Mount Recommendations

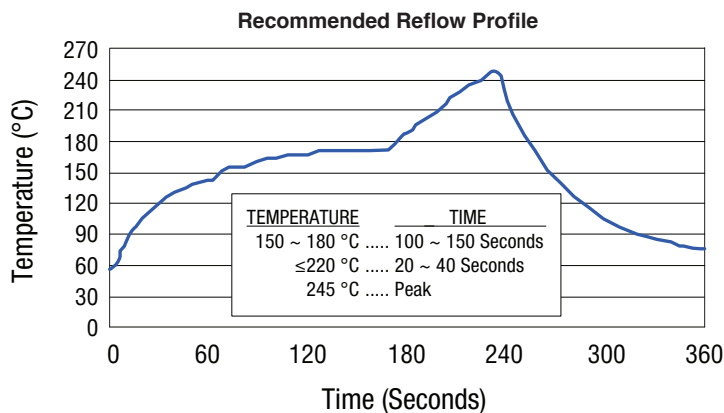
The Model SC Series breaker is designed for reflow and hand soldering. It is not designed or warranted for flow soldering. The following conditions must be adhered to:

Reflow Soldering:

The recommended reflow soldering conditions are as follows:

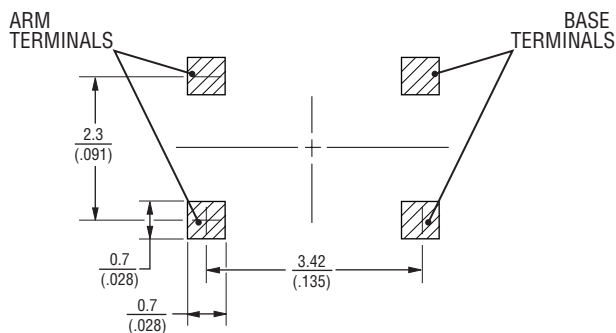
150 ~ 180 °C	100 ~ 150 seconds
≤220 °C.....	20 ~ 40 seconds
255 ~ 260 °C	5 ~ 10 seconds

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.



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

Recommended Land Pattern



Recommended Mask Thickness: 0.12 mm / (.005 in.)

Recommended Solder Particle Size: 30 μ m

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 impact on the function of the breaker.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

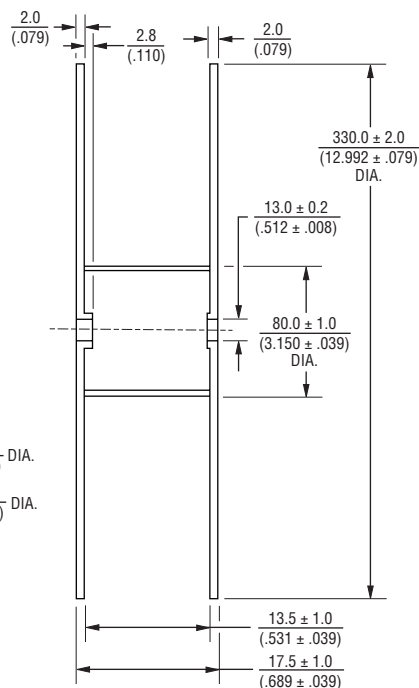
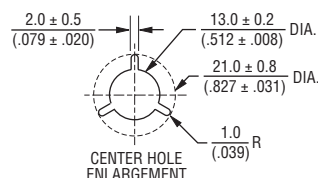
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Reel (13 inch)	5,000 pcs. (fixed)
Outer Box (690 mm x 344 mm x 136 mm)	50,000 pcs. (fixed)
Marking..... A label will be attached on the reel and outer box which includes the following items, at a minimum:	
Part name, part number, quantity, lot number, safety approval mark (UL, etc.), company name (Bourns KK) and any other items required by the customer	

Technical drawing of a circular mechanical part, likely a flywheel or a similar component, showing a top view. The drawing includes the following dimensions and features:

- Outer Diameter:** 10.0 (.394) DIA.
- Inner Diameter:** 90.0 (3.543) DIA.
- Spoke Width Radius:** R 5.0 (.197)
- Spoke Angle:** 35°
- Centerlines:** Dashed lines indicate the centerlines of the spokes and the overall part.
- Hidden Features:** Dashed circles and lines indicate hidden features, such as the inner hole and the center of the part.



DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$ TOLERANCES: $\frac{0.1}{(.004)}$ UNLESS OTHERWISE NOTED

Technical drawing of a 12-hole metal plate. The drawing includes a top view and a side view. The top view shows a rectangular plate with 12 holes arranged in two rows of six. Dimensions are given in mm and inches. The side view shows the profile of the plate, including the thickness and the depth of the holes.

Top View Dimensions:

- Overall width: $120.00 \pm 0.2 / -0.1$ mm ($.472 \pm .008 / -.004$) in.
- Overall height: 5.05 mm ($.199$) in.
- Distance from left edge to first hole center: $1.50 \pm 0.1 / -0$ mm ($.059 \pm .004 / -.000$) in.
- Distance between hole centers: 8.00 mm ($.315$) in.
- Distance from last hole center to right edge: 4.00 mm ($.157$) in.
- Distance from top edge to hole center: 5.5 mm ($.217$) in.
- Distance from hole center to bottom edge: 1.75 mm ($.069$) in.
- Distance from hole center to bottom edge (alternative): 2.00 mm ($.079$) in.

Side View Dimensions:

- Overall height: 5.05 mm ($.199$) in.
- Distance from top edge to hole center: $1.5 \pm 0.2 / -0.1$ mm ($.059 \pm .008 / -.004$) in.
- Distance from hole center to bottom edge: $1.2 \pm 0.2 / -0.1$ mm ($.047 \pm .008 / -.004$) in.

Notes:

- The corner and ridge radii are 0.3 mm / (.012 in.).
- Cumulative tolerance for hole is ± 0.2 mm / (.008 in.).
- Measuring of cavity...

NOTES:

- 1) The corner and ridge radii (R) of inside cavity are 0.3 mm / (.012 in.) max.
- 2) Cumulative tolerance of 10 pitches of the sprocket hole is ± 0.2 mm / (.008 in.).
- 3) Measuring of cavity positioning is based on cavity center in accordance with JIS/IEC standard.

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