

SC Series Breaker (Surface Mount Thermal Cutoff Device)

BOURNS®

Surface Mount Recommendations

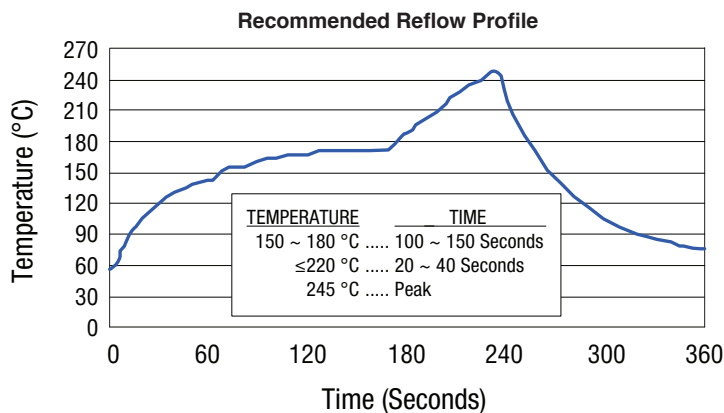
The Model SC Series breaker is designed for reflow and hand soldering. It is not designed or warranted for flow soldering. The following conditions must be adhered to:

Reflow Soldering:

The recommended reflow soldering conditions are as follows:

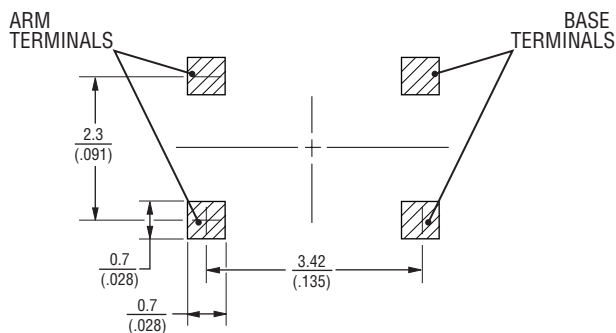
150 ~ 180 °C	100 ~ 150 seconds
≤220 °C	20 ~ 40 seconds
255 ~ 260 °C	5 ~ 10 seconds

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 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 impact on the function of the breaker.

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

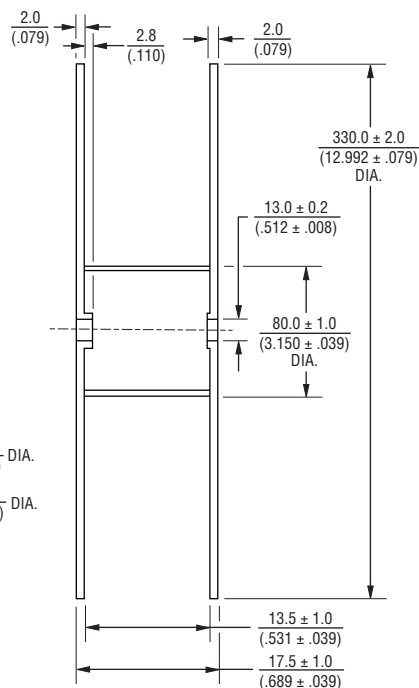
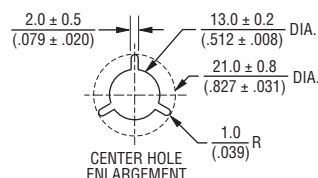
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Reel (13 inch)	5,000 pcs. (fixed)
Outer Box (690 mm x 344 mm x 136 mm)	50,000 pcs. (fixed)
Marking..... A label will be attached on the reel and outer box which includes the following items, at a minimum:	
Part name, part number, quantity, lot number, 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:** R 5.0 (.197)
- Angle:** 35°
- Centerlines:** Dashed lines indicate the centerlines of the spokes and the overall circular features.
- Hidden Features:** Dashed lines also indicate hidden features, such as the inner holes of the spokes.



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

Technical drawing of a multi-hole plate. The drawing includes a top view and a side view. The top view shows a rectangular plate with a series of holes. Dimensions are given in mm and inches. The top view dimensions include: 8.00 (.315), 2.00 (.079), 4.00 (.157), 1.75 (.069), 5.5 (.217), 1.50 +0.1/-0 (.059 +.004/-0.000), 12.00 +0.2/-0.1 (.472 +.008/-0.004), and 5.05 (.199). The side view shows the profile of the plate with dimensions: 1.5 +0.2/-0.1 (.059 +.008/-0.004), 1.2 +0.2/-0.1 (.047 +.008/-0.004), and 0.3 ± 0.05 (.012 ± .002). The drawing also includes a note: 'NOTES: 1) The corner and ridge ... are 0.3 mm / (.012 in.) 2) Cumulative tolerance ... hole is ±0.2 mm / (.008 in.) 3) Measuring 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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