

PASTE IN HOLE TECHNOLOGY

For Samtec's Applicable Through-Hole and Mixed Technology Connectors

Paste in hole technology employs the same techniques for through-hole soldering as those used for standard surface mount connectors and components. Samtec provides the recommended stencil aperture and plated through-hole sizes for each connector series capable of being processed using paste in hole technology on the connector footprint. All Samtec connector footprints are located under their respective technical specifications page on www.samtec.com.

Below is a partial list of Samtec connectors that utilize paste in hole technology. In some cases the entire connector may be soldered in this manner and in others it will only be certain through-hole features.

Samtec Series

ERF8/ERM8
ERF8-RA/ERM8-RA
FSH
HSEC8
HSEC8-RA
IJ5/IP5
MB1
MEC1-RA
MEC2
MEC8-RA
MECF
QSE/QTE
QSS/QTS
QSH/QTH
QSS-RA/QTS-RA
QFS/QMS
QFS-RA/QMS-RA
QRF8-RA/QRM8-RA
SEAF-RA/SEAM-RA
S2M/T2M
SFM/TFM

To be a candidate for paste in hole soldering, a connector must have the following characteristics:

- Insulator body material capable of withstanding lead and/or lead-free reflow temperatures
- Vertical and horizontal clearance around leads large enough to allow adequate printed solder paste volume.

Samtec's stencil aperture recommendations are calculated using:

1. The nominal plated through-hole diameter found on the connector footprint
2. The nominal connector tail dimensions
3. 0.062" [1.57 mm] printed circuit board thickness, unless otherwise noted.

Note: Boards thicker than 0.062" [1.57 mm] require larger stencil apertures to provide the needed solder volume. Therefore, depending on the connector geometry, some may not be suitable for paste in hole technology on boards thicker than 0.062" [1.57 mm].