

FREE HEIGHT 0.8 mm PITCH BOARD-TO-BOARD CONNECTOR (SMT)

1. SCOPE

1.1. Contents

This specification covers the requirements for mount of Free Height 0.8 mm Pitch Board-to-Board Connector.

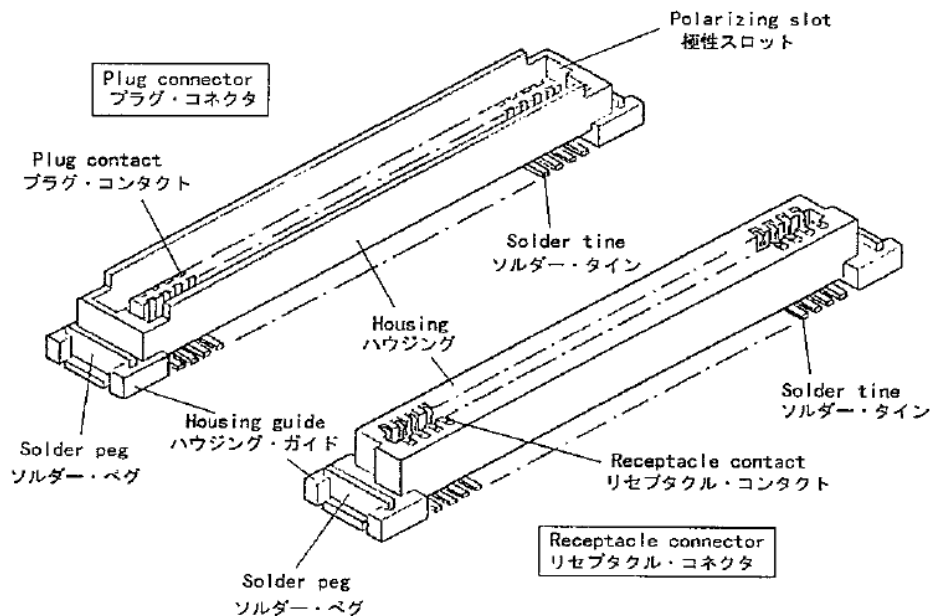
2. RELATED SPECIFICATIONS

- A. 108-5390 Product Specification
- B. 501-5099 Test Report
- C. 411-5666-1 Instructional Sheet

3. RELATED PARAMETERS

- A. Wipe length 1.2mm
- B. Stack height tolerance $\pm 0.3\text{mm}$

4. PRODUCT FEATURES (AS SHOWN: WITH SOLDERPEG TYPE)



5. REQUIREMENTS

5.1. Storage

- A. This connector is packaged and shipped in an emboss tape, tube or hard tray. It is recommended that the connector remain in the container to prevent contamination and/or dust accumulation. Also, it should be stored in an environment of temperature of 5~35°C, humidity of 45~75%, and free from poisonous gases.
- B. If this connector is stored in the middle of operation, it should not remain naked.
- C. It is recommend that this connector should not be stored for a long time after opening its package and that it is used within three months.

5.2. Printed Circuit Board

The PC board shall be glass epoxy. If a thin board is used, it is recommended that ample support is provided underneath to prevent bowing of board during mating.

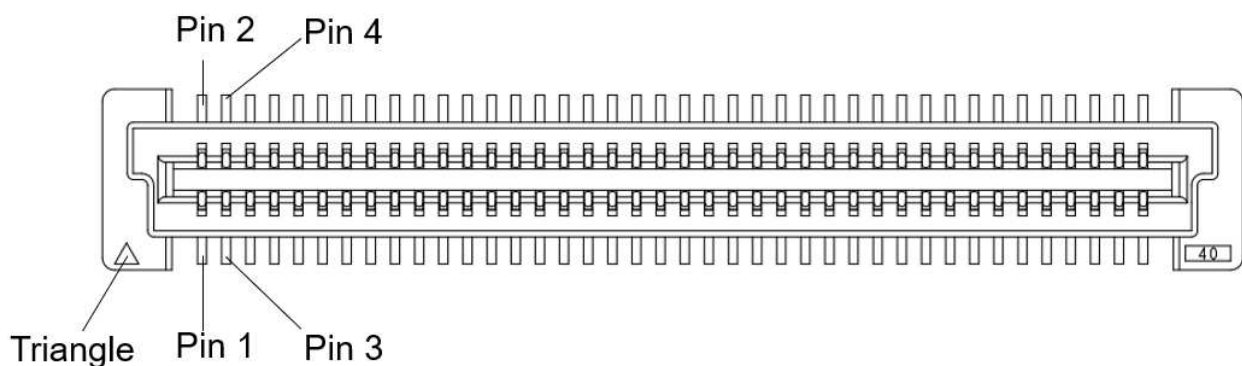
5.3. PC Board Layout

Please refer to Tyco's Customer Drawing.

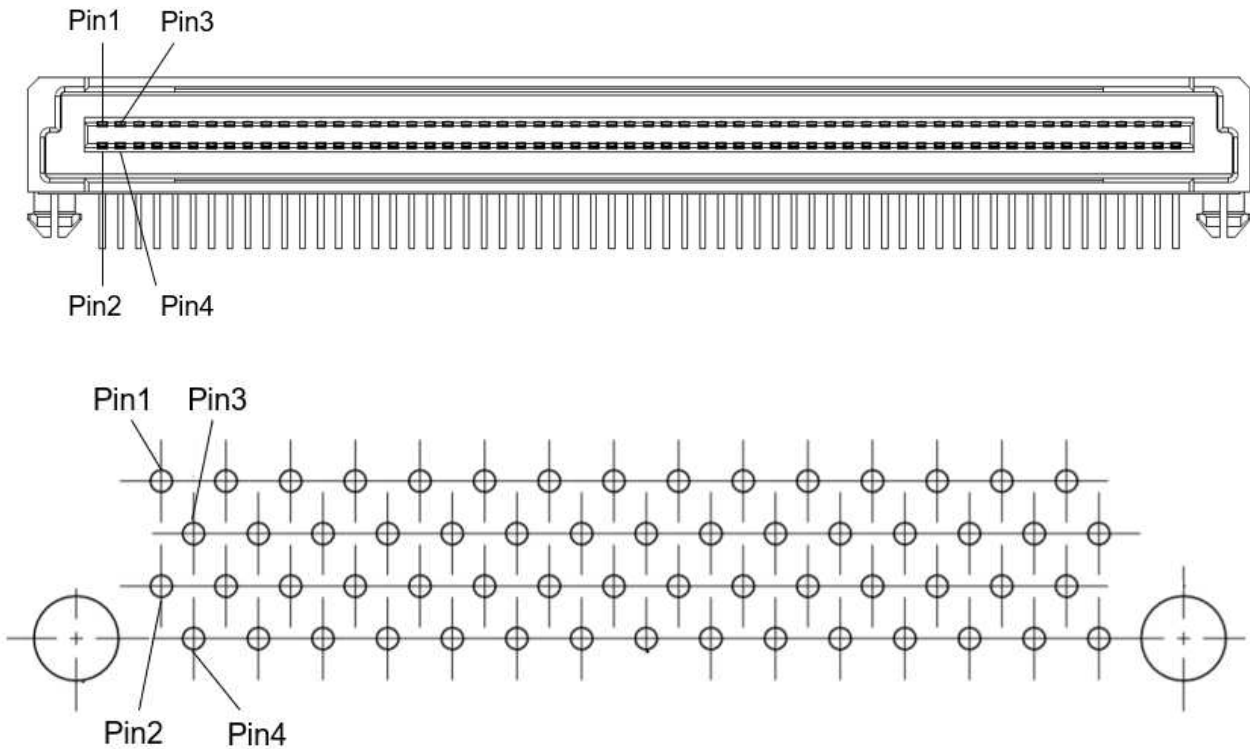
5.4. Pin position definition

The triangle mark position is the first pin, then the opposite side is the second pin.

A. Vertical type



B. Right-angle type



5.5. Solder Techniques

A. Recommended Solder Paste

Alloy type shall be either 63Sn/37Pb or 60Sn/40Pb for leaded application, or SAC 405 for lead-free application.

Flux shall be RMA type

B. Solder Volume

Recommended stencil thickness: 0.15~0.18 mm.

Recommended solder volume and an example of aperture pad DIM. (Per pad)

	Solder Volume (mm ³)	An example of aperture pad DIM. (mm)	
		stencil thickness: 0.15t	stencil thickness: 0.18t
Plug contact	0.110	0.4W X 1.8L	0.4W X 1.52L
Receptacle contact	0.114	0.4W X 1.9L	0.4W X 1.58L
Solder peg	1.050	3.5W X 2.0L	3.5W X 1.67L

C. Solder Mask

Solder mask is recommended between all pads. If a trace is run between adjacent pads on the solder side of the pc board, a solder mask must be applied over the trace to prevent bridging and wicking of solder away from the contact solder tines. Liquid photo imageable or dry film solder masks are recommended. The recommended thickness of mask: 0.01~0.05mm.

D. Reflow Condition

For leaded application:

Preheat:	100~150°C; 60 sec. min.
Heat:	210°C min.; 30 sec. max.
Heat Peak:	240°C max.

For lead-free application:

Refer to IPC/JEDEC J-STD-020.

E. Connector Placement

Please adjust the automatic mounting machine in such a way that it is set up at a leveled surface, without deforming the solder tines. Optimally, the connector solder tines should be aligned such that they are centered on the PC board pads.

F. Repair

If a soldering iron is used, full care must be taken to prevent the soldering iron tip from contacting the solder tine.

Recommended temperature of soldering iron:	300°C max.
Operating duration:	4 sec. max. per pad.