

## MULTIPOINT IDC TERMINAL

**i** All numerical values are in metric units. Dimensions are in millimeters. Figures and illustrations are for identification only and are not drawn to scale

### 1. INTRODUCTION

This specification covers the requirements for application of MULTIPOINT IDC TERMINAL. Applicable wire size and pitch refer Figure 1.

When corresponding with TE Connectivity Personnel, use the terminology provided on this specification to help facilitate your inquiry for information. Basic terms and features of components are provided in Figure 2.

Series	Pitch	Applicable wire
MULTIPOINT IDC TERMINAL	2.975	AWG24/7 Outer diameter $1.0\text{mm} \pm 0.05\text{mm}$ AWG26/7 Outer diameter $1.0\text{mm} \pm 0.05\text{mm}$

Figure 1

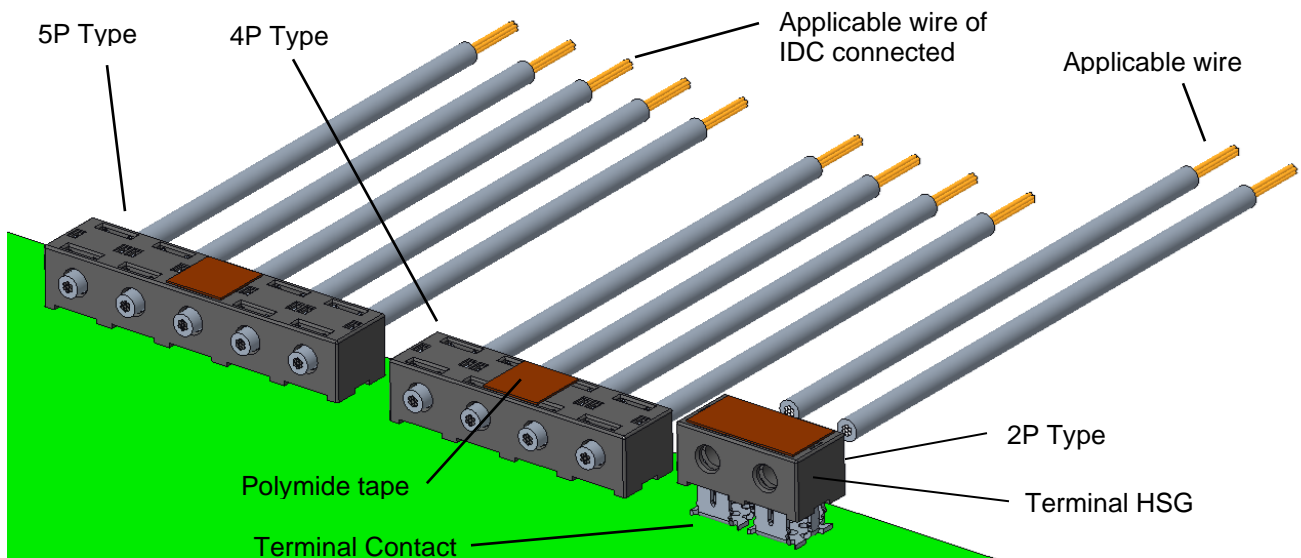


Figure 2

## 2. REFERENCE MATERIAL

### 2.1. Customer drawings

Customer Drawings for the connectors are available from the service network. The information contained in Customer Drawings takes priority if there is a conflict with this specification or with any technical documentation supplied by TE connectivity.

### 2.2. Specifications

Product Specification provides test and performance requirements.

108-140330

## 3. REQUIREMENTS

### 3.1. Storage

#### A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the pc board connector material.

#### B. Shelf Life

To prevent damage to these connectors, they should remain in the container until ready for installation. Also, to prevent possible storage contamination, the connectors should be used on a first in, first out basis.

#### C. Chemical Exposure

Do not store connectors near any chemical listed below as they may cause stress corrosion cracks in the connector.

Alkalies	Ammonia	Citrates	Phosphates	Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfur Nitrites		Tartrates

### 3.2. PC Board Layout

#### A. Single connector

Use a pc board. Customer drawings provide a complete definition of pc board layout.

### 3.3. Wire selection, Preparation and Installation

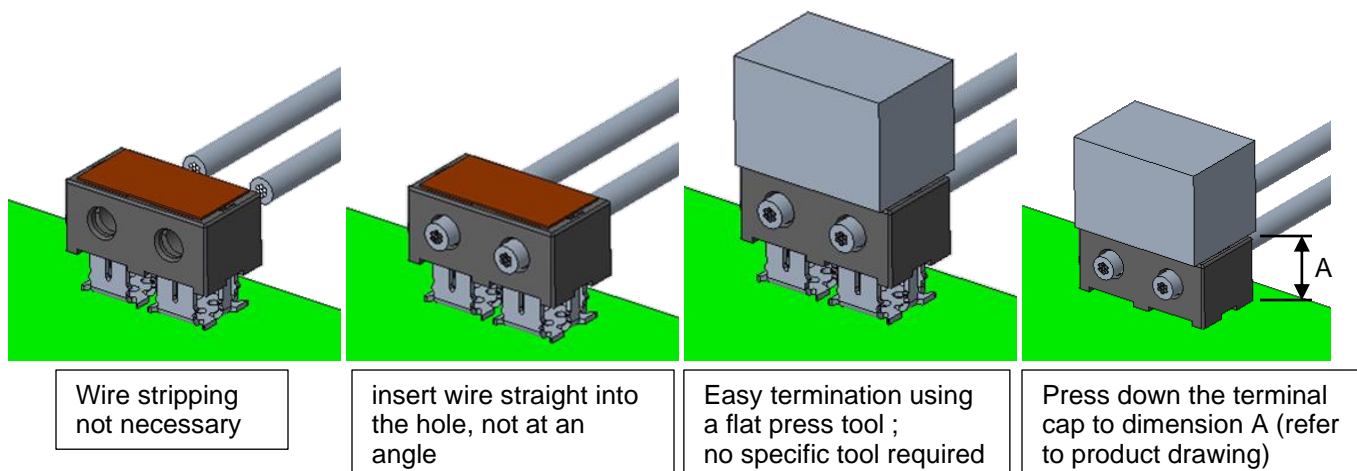
#### A. Selection

The connectors will accept wires with conductors of the sizes defined in Figure 1.

#### B. Installation

Wire termination process refer to Figure 3.

- 2P Type : Press the entire polyimide tape.



- 4P and 5P Type : Avoid the area with the polyimide tape (width 2.8 REF) and press the rest.

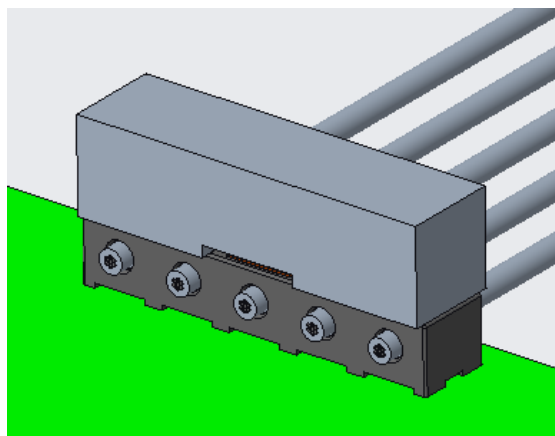


Figure 3

### 3.4. Reflow Soldering

#### A. Solder Paste Characteristics

1. Alloy type (lead-free solder) shall be compatible with pure tin or gold, for example, SAC 305 (96.6 Sn/3 Ag/0.5 Cu) or SAC 405 (95.5 Sn/4 Ag/0.5 Cu).
2. Flux incorporated in the paste shall be rosin, mildly active (RMA) type.
3. Paste will be at least 80% solids by volume.
4. Mesh designation -200 to +325 (74 to 44 square micron openings, respectively).
5. Minimum viscosity of screen print shall be  $5 \times 10\%$  cp (centipoise).
6. Minimum viscosity of stencil print shall be  $7.5 \times 10\%$  cp (centipoise).



Adjust solder volume to meet appearance requirement, is defined by user.

## B. Process

The SHR connectors can be soldered using non-focused infrared reflow (IR) or equivalent soldering techniques. The temperatures and exposure time shall be as specified in Figure 4.

SOLDERING PROCESS	TEMPERATURE	IMMERSION DURATION
IR	$260 \pm 5^{\circ}\text{C}$	$10 \pm 1$ Seconds

Figure 4

The reflow profile is given in Figure 5.

Average Ramp Rate and Ramp to Peak	Preheat		Time Over Liquids ( $217^{\circ}\text{C}$ )	Peak Temperature	Time Within $5^{\circ}\text{C}$ of Peak	Ramp (Cool Down)	Time to Peak ( $25^{\circ}\text{C}$ )
	Temperature	Time					
$3^{\circ}\text{C}/\text{Sec}$ max	150- $200^{\circ}\text{C}$	60-180 Sec	60-150 Sec	$260+0/-5^{\circ}\text{C}$	20-40 Sec	$6^{\circ}\text{C}/\text{Sec}$ Max	8 Min/Max

Figure 5

## 3.5. Repair

It can not be repaired after installation.

## 4. VISUAL AID

Figure 6 shows typical application of MULTIPOINT IDC TERMINAL and calls out the conditions that production personnel should check to ensure a good installation. For dimensional inspection, refer to the details in the preceding pages of this specification.

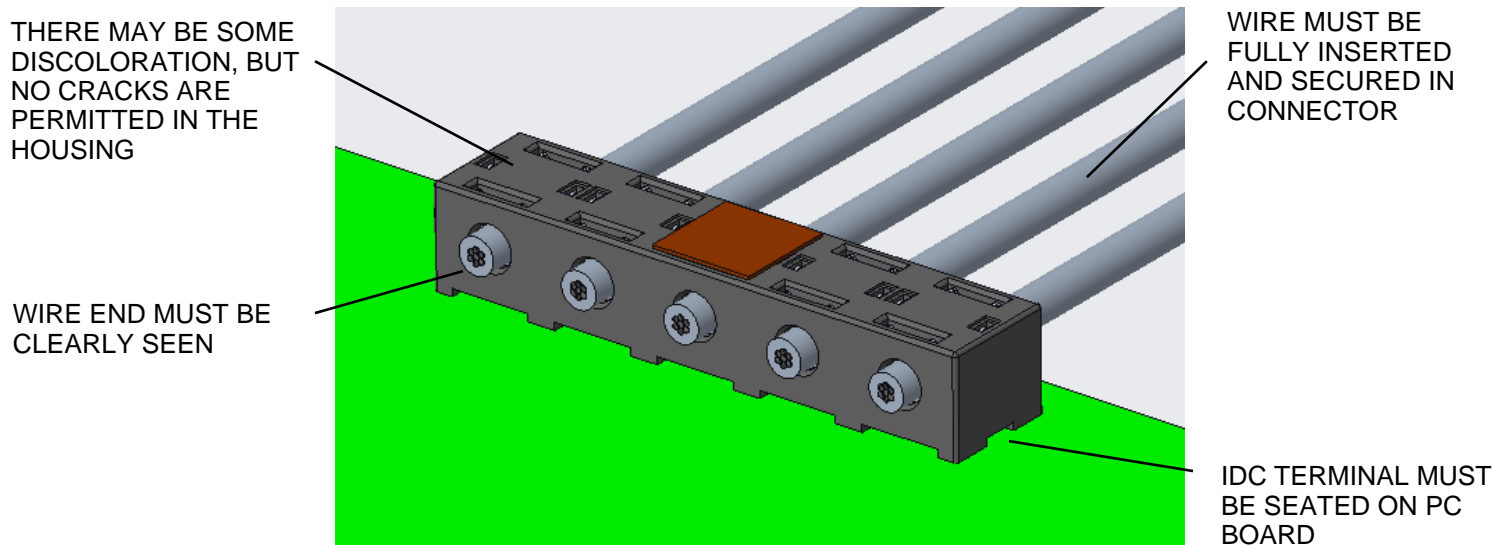


Figure 6