

# TX1/TX2/TX3 SERIES CONNECTORS

## 1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors



### FEATURES

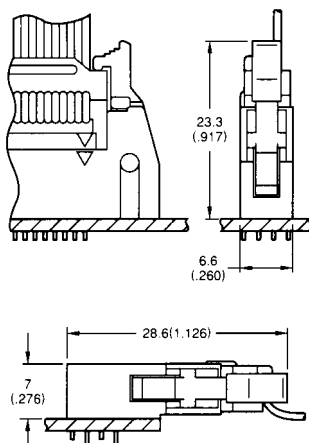
#### ■ IDC Socket (TX1/TX2)

- Flat ribbon cable centers:  
0.635mm (.025") for TX1  
1.27mm (.050") for TX2
- TX1 socket can be terminated in "daisy-chain" style in the middle of the cable
- TX2 socket is terminated at the end of the two stacked cables
- Socket contacts have dual-contact-point tuning fork design
- All wires can be terminated in a single action (Insulation is automatically removed)

#### ■ Pin Header With Latch (TX3)

- Available in straight and right angle through hole types
- Self-locking, self-ejecting lever for easy operation

Connector Profile (Ref.)



.....

TX 1 to 3 Series connectors are two-piece PCB connectors with 1.27mm (.050") contact spacing.

They are designed for board-to-cable applications.

Configurations include IDC sockets (TX1 and TX2) for flat ribbon cable; and pin headers (TX3) with a latching mechanism.

Applications include computers, business machines, industrial control machinery, telecommunications, audiovisual appliances, measuring equipment, and applications wherever high density packaging is required.

### GENERAL SPECIFICATIONS

|                                 |                                         |
|---------------------------------|-----------------------------------------|
| Number of Contacts              | 20, 26, 30, 34, 40, 50, 60, 68, 80, 100 |
| Contact Spacing                 | 1.27mm (.050"), Double row              |
| Current Rating                  | 0.5 Amps                                |
| Operating Voltage               | 250 VAC r.m.s.                          |
| Dielectric Withstanding Voltage | 500 VAC r.m.s. (for one minute)         |
| Insulation Resistance           | 100 megohms min.                        |
| Contact Resistance              | 25 milliohms max.                       |
| Operating Temperature           | -40°C to + 80°C                         |
| Applicable PCB Thickness        | 1.6mm (.063")                           |
| Applicable F.R.C.: TX1          | 0.635mm (.025") pitch: #30 AWG          |
| TX2                             | 1.27mm (.050") pitch: #28 AWG           |

### MATERIALS AND FINISHES

#### TX1/TX2

| Description    | Materials/Finishes                                                                                                                     |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Insulator      | PBT (UL94V-0, Black)                                                                                                                   |
| Strain Relief  | Glass-filled Nylon (UL94V-0, Black)                                                                                                    |
| Cover          | Glass-filled Nylon (UL94V-0, Black)                                                                                                    |
| Contact (Note) | Beryllium Copper<br>Connecting area: Gold plating over Nickel<br>IDC Terminal area: Tin plating<br>Other areas: Gold flash over Nickel |

#### TX3

| Description    | Materials/Finishes                                                                         |
|----------------|--------------------------------------------------------------------------------------------|
| Insulator      | PBT (UL94V-0, Black)                                                                       |
| Expansion Post | Phosphor Bronze/Tin plating                                                                |
| Lever (TX3)    | Nylon (UL94V-0, Black)                                                                     |
| Contact (Note) | Phosphor Bronze<br>Connecting area: Gold plating over Nickel<br>Terminal area: Tin plating |

Note: Contact finish – Gold plating on connecting area is 0.1µm (.000004") min.

Dimensions and specifications subject to change without notice.

# TX1/TX2/TX3 SERIES CONNECTORS

1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors

## ORDERING INFORMATION

|                      | TX                                                                                                                    | *     | -     | **    | *     | -     | D2    | **    | *     | -     | *     | *     | *     | *     |
|----------------------|-----------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Series               | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| Connector Type       | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | 1 – IDC Socket, .635mm (.025") pitch cable<br>2 – IDC Socket, 1.27mm (.050") pitch cable<br>3 – Pin Header with latch |       |       |       |       |       |       |       |       |       |       |       |       |       |
| No. of Contacts      | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | 20, 26, 30, 34, 40, 50, 60, 68, 80, 100                                                                               |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Contact Type         | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | S – Socket (TX1, TX2)<br>P – Pin (TX3)                                                                                |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Contact Arrangement  | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | D2 – Double Row                                                                                                       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Termination          | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | P – IDC<br>LT – Right Angle Through Hole<br>ST – Straight Through Hole                                                |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Applicable Wire      | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | 1 – #30 AWG (TX1)<br>#28 AWG (TX2)                                                                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Latch Type (TX3)     | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | L – Standard Latch<br>S – Short Latch                                                                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Expansion Post (TX3) | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | H – With Post<br>N – Without Post                                                                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Contact Finish Code  | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | 1 – 0.1µm (.000004") thick gold plating min.                                                                          |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Cover Style          | _____                                                                                                                 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
|                      | C – Closed End (TX2)<br>D – Daisy Chain (TX1)                                                                         |       |       |       |       |       |       |       |       |       |       |       |       |       |

Dimensions in mm (inches).

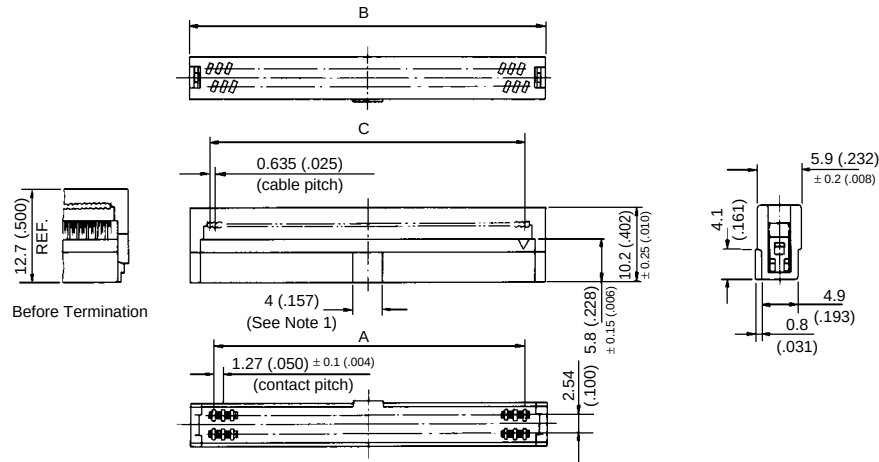


# TX1/TX2/TX3 SERIES CONNECTORS

## 1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors

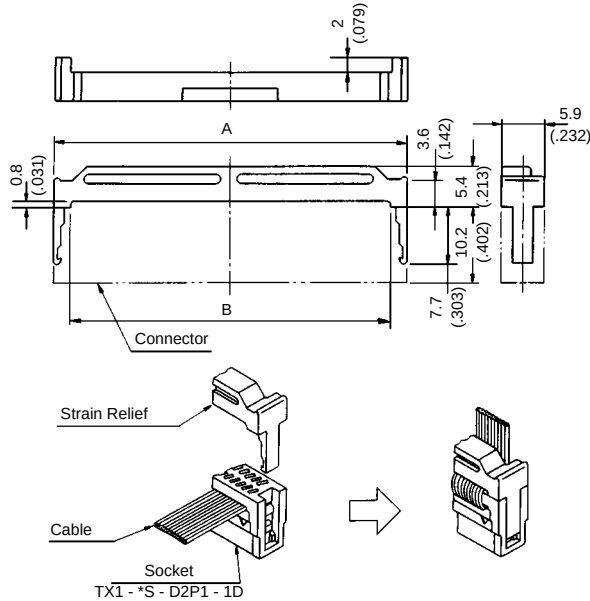
### IDC TYPE SOCKET (FOR FLAT RIBBON CABLE)

#### TX1—For 0.635mm (.025") Pitch Cable



Note 1: For 80 and 100 position connectors, two polarizing bosses are provided. For other contact arrangements, one polarizing boss is provided at the center.

#### • STRAIN RELIEF: TX1-SR\*\*



#### APPLICABLE CABLE WIRE (0.635mm/.025" pitch)

1. Conductor: #30 AWG wire, 7 strands of 0.102mm (.004") diameter, tin plated soft copper.  
#30 AWG wire, solid of 0.254mm (.010") diameter, tin plated soft copper.
2. Insulation: Soft polyvinyl chloride (PVC) or Teflon, 0.7mm (.028") max. thickness.

#### APPLICABLE IDC TOOL

Pneumatic, semi-automatic, IDC tool: SP399-2-TX1  
Hand IDC tool: SP299-2-TX1

| No. of Contacts | Part Number      | A<br>± 0.15 (± .006) | B<br>+0.1 (+ .004)<br>-0.2 (- .008) | C              | Strain Relief Part Number | A<br>± 0.1 (± .004) | B<br>± 0.1 (± .004) |
|-----------------|------------------|----------------------|-------------------------------------|----------------|---------------------------|---------------------|---------------------|
| 20              | TX1- 20S-D2P1-1D | 11.43 ( .450)        | 17.4 ( .685)                        | 12.065 ( .475) | TX1-SR 20                 | 17.43 ( .686)       | 13.00 ( .512)       |
| 26              | TX1- 26S-D2P1-1D | 15.24 ( .600)        | 21.2 ( .835)                        | 15.875 ( .625) | TX1-SR 26                 | 21.24 ( .836)       | 16.81 ( .662)       |
| 30              | TX1- 30S-D2P1-1D | 17.78 ( .700)        | 23.8 ( .937)                        | 18.415 ( .725) | TX1-SR 30                 | 23.78 ( .936)       | 19.35 ( .762)       |
| 34              | TX1- 34S-D2P1-1D | 20.32 ( .800)        | 26.3 (1.035)                        | 20.955 ( .825) | TX1-SR 34                 | 26.32 (1.036)       | 21.89 ( .862)       |
| 40              | TX1- 40S-D2P1-1D | 24.13 ( .950)        | 30.1 (1.185)                        | 24.765 ( .975) | TX1-SR 40                 | 30.13 (1.186)       | 25.70 (1.012)       |
| 50              | TX1- 50S-D2P1-1D | 30.48 (1.200)        | 36.5 (1.437)                        | 31.115 (1.225) | TX1-SR 50                 | 36.48 (1.436)       | 32.05 (1.262)       |
| 60              | TX1- 60S-D2P1-1D | 36.83 (1.450)        | 42.8 (1.685)                        | 37.465 (1.475) | TX1-SR 60                 | 42.83 (1.686)       | 38.40 (1.512)       |
| 68              | TX1- 68S-D2P1-1D | 41.91 (1.650)        | 47.9 (1.886)                        | 42.545 (1.675) | TX1-SR 68                 | 47.91 (1.886)       | 43.48 (1.712)       |
| 80              | TX1- 80S-D2P1-1D | 49.53 (1.950)        | 55.5 (2.185)                        | 50.165 (1.975) | TX1-SR 80                 | 55.53 (2.186)       | 51.10 (2.012)       |
| 100             | TX1-100S-D2P1-1D | 62.23 (2.450)        | 68.2 (2.685)                        | 62.865 (2.475) | TX1-SR100                 | 68.23 (2.686)       | 63.80 (2.512)       |

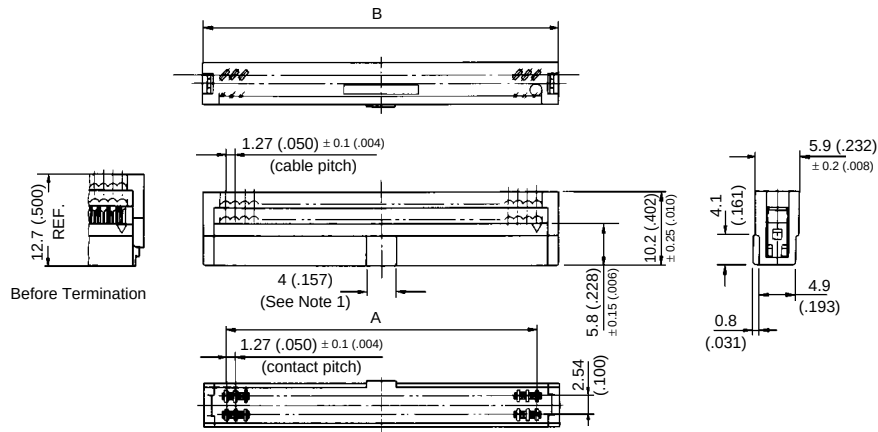
Dimensions in mm (inches).

# TX1/TX2/TX3 SERIES CONNECTORS

## 1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors

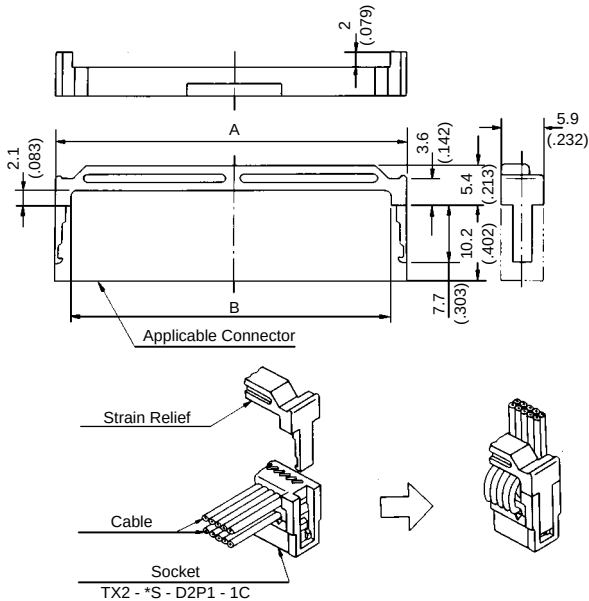
### IDC TYPE SOCKET (FOR FLAT RIBBON CABLE)

#### TX2—For 1.27mm (.050") Pitch Cable



Note 1: For 80 and 100 position connectors, two polarizing bosses are provided. For other contact arrangements, one polarizing boss is provided at the center.

#### • STRAIN RELIEF: TX2-SR\*\*



#### APPLICABLE CABLE WIRE (1.27mm/.050" pitch)

- Conductor: #28 AWG wire, 7 strands of 0.12mm (.005") or 0.127mm (.0049") diameter, tin plated soft copper.  
#28 AWG wire, solid of 0.32mm (.013") diameter, tin plated soft copper.
- Insulation: Soft polyvinyl chloride (PVC) or Teflon, 0.88 to 1.0mm (.035 to .039") thickness.

#### APPLICABLE IDC TOOL

Pneumatic, semi-automatic, IDC tool: SP399-2-TX2  
Hand IDC tool: SP299-2-TX2

| No. of Contacts | Part Number      | A<br>± 0.15 (± .006) | B<br>+0.1<br>-0.2<br>(+.004<br>-.008) | Strain Relief<br>Part Number | A<br>± 0.1 (± .004) | B<br>± 0.1 (± .004) |
|-----------------|------------------|----------------------|---------------------------------------|------------------------------|---------------------|---------------------|
| 20              | TX2- 20S-D2P1-1C | 11.43 ( .450)        | 17.4 ( .685)                          | TX2-SR 20                    | 17.43 ( .686)       | 13.00 ( .512)       |
| 26              | TX2- 26S-D2P1-1C | 15.24 ( .600)        | 21.2 ( .835)                          | TX2-SR 26                    | 21.24 ( .836)       | 16.81 ( .662)       |
| 30              | TX2- 30S-D2P1-1C | 17.78 ( .700)        | 23.8 ( .937)                          | TX2-SR 30                    | 23.78 ( .936)       | 19.35 ( .762)       |
| 34              | TX2- 34S-D2P1-1C | 20.32 ( .800)        | 26.3 (1.035)                          | TX2-SR 34                    | 26.32 (1.036)       | 21.89 ( .862)       |
| 40              | TX2- 40S-D2P1-1C | 24.13 ( .950)        | 30.1 (1.185)                          | TX2-SR 40                    | 30.13 (1.186)       | 25.70 (1.012)       |
| 50              | TX2- 50S-D2P1-1C | 30.48 (1.200)        | 36.5 (1.437)                          | TX2-SR 50                    | 36.48 (1.436)       | 32.05 (1.262)       |
| 60              | TX2- 60S-D2P1-1C | 36.83 (1.450)        | 42.8 (1.685)                          | TX2-SR 60                    | 42.83 (1.686)       | 38.40 (1.512)       |
| 68              | TX2- 68S-D2P1-1C | 41.91 (1.650)        | 47.9 (1.886)                          | TX2-SR 68                    | 47.91 (1.886)       | 43.48 (1.712)       |
| 80              | TX2- 80S-D2P1-1C | 49.53 (1.950)        | 55.5 (2.185)                          | TX2-SR 80                    | 55.53 (2.186)       | 51.10 (2.012)       |
| 100             | TX2-100S-D2P1-1C | 62.23 (2.450)        | 68.2 (2.685)                          | TX2-SR100                    | 68.23 (2.686)       | 63.80 (2.512)       |

Dimensions in mm (inches).

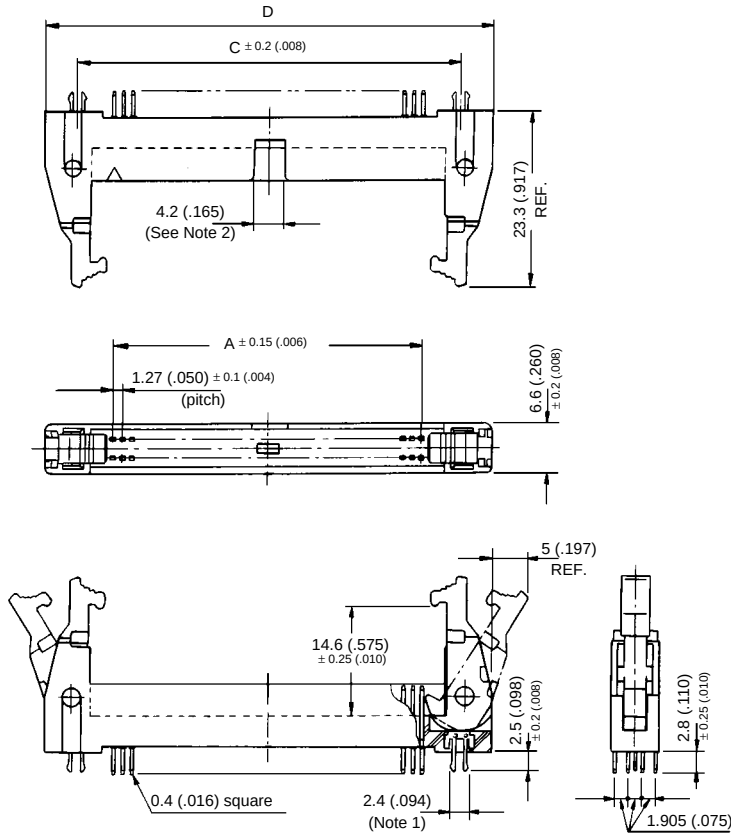


# TX1/TX2/TX3 SERIES CONNECTORS

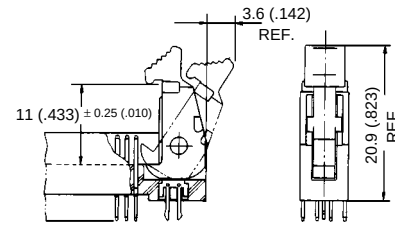
1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors

## PIN HEADER WITH LATCHING MECHANISM TX3-ST—Straight Through Hole Type

### STANDARD LATCH TYPE



### SHORT LATCH TYPE



Note: For short lever type, do not use strain relief on the mating IDC socket connector.

Note 1: Above figure shows the connector with expansion post. Without-expansion-post type is also available.

Note 2: For 80 and 100 position connectors, two polarizing keyways are provided. For other contact arrangements, one polarizing keyway is provided at the center.

• Refer to PCB Mounting Hole Dimension Illustration.

| No. of<br>Contacts | Part Number         |                        |                     |                        | A             | C             | D<br>± 0.4 (± .016) |
|--------------------|---------------------|------------------------|---------------------|------------------------|---------------|---------------|---------------------|
|                    | Standard Latch Type |                        | Short Latch Type    |                        |               |               |                     |
|                    | With Expansion Post | Without Expansion Post | With Expansion Post | Without Expansion Post |               |               |                     |
| 20                 | TX3- 20P-D2ST-LH1   | TX3- 20P-D2ST-LN1      | TX3- 20P-D2ST-SH1   | TX3- 20P-D2ST-SN1      | 11.43 ( .450) | 21.59 ( .850) | 30.4 (1.197)        |
| 26                 | TX3- 26P-D2ST-LH1   | TX3- 26P-D2ST-LN1      | TX3- 26P-D2ST-SH1   | TX3- 26P-D2ST-SN1      | 15.24 ( .600) | 25.40 (1.000) | 34.2 (1.346)        |
| 30                 | TX3- 30P-D2ST-LH1   | TX3- 30P-D2ST-LN1      | TX3- 30P-D2ST-SH1   | TX3- 30P-D2ST-SN1      | 17.78 ( .700) | 27.94 (1.100) | 36.8 (1.449)        |
| 34                 | TX3- 34P-D2ST-LH1   | TX3- 34P-D2ST-LN1      | TX3- 34P-D2ST-SH1   | TX3- 34P-D2ST-SN1      | 20.32 ( .800) | 30.48 (1.200) | 39.3 (1.547)        |
| 40                 | TX3- 40P-D2ST-LH1   | TX3- 40P-D2ST-LN1      | TX3- 40P-D2ST-SH1   | TX3- 40P-D2ST-SN1      | 24.13 ( .950) | 34.29 (1.350) | 43.1 (1.697)        |
| 50                 | TX3- 50P-D2ST-LH1   | TX3- 50P-D2ST-LN1      | TX3- 50P-D2ST-SH1   | TX3- 50P-D2ST-SN1      | 30.48 (1.200) | 40.64 (1.600) | 49.5 (1.949)        |
| 60                 | TX3- 60P-D2ST-LH1   | TX3- 60P-D2ST-LN1      | TX3- 60P-D2ST-SH1   | TX3- 60P-D2ST-SN1      | 36.83 (1.450) | 46.99 (1.850) | 55.8 (2.197)        |
| 68                 | TX3- 68P-D2ST-LH1   | TX3- 68P-D2ST-LN1      | TX3- 68P-D2ST-SH1   | TX3- 68P-D2ST-SN1      | 41.91 (1.650) | 52.07 (2.050) | 60.9 (2.398)        |
| 80                 | TX3- 80P-D2ST-LH1   | TX3- 80P-D2ST-LN1      | TX3- 80P-D2ST-SH1   | TX3- 80P-D2ST-SN1      | 49.53 (1.950) | 59.69 (2.350) | 68.5 (2.697)        |
| 100                | TX3- 100P-D2ST-LH1  | TX3- 100P-D2ST-LN1     | TX3- 100P-D2ST-SH1  | TX3- 100P-D2ST-SN1     | 62.23 (2.450) | 72.39 (2.850) | 81.2 (3.197)        |

Dimensions in mm (inches).

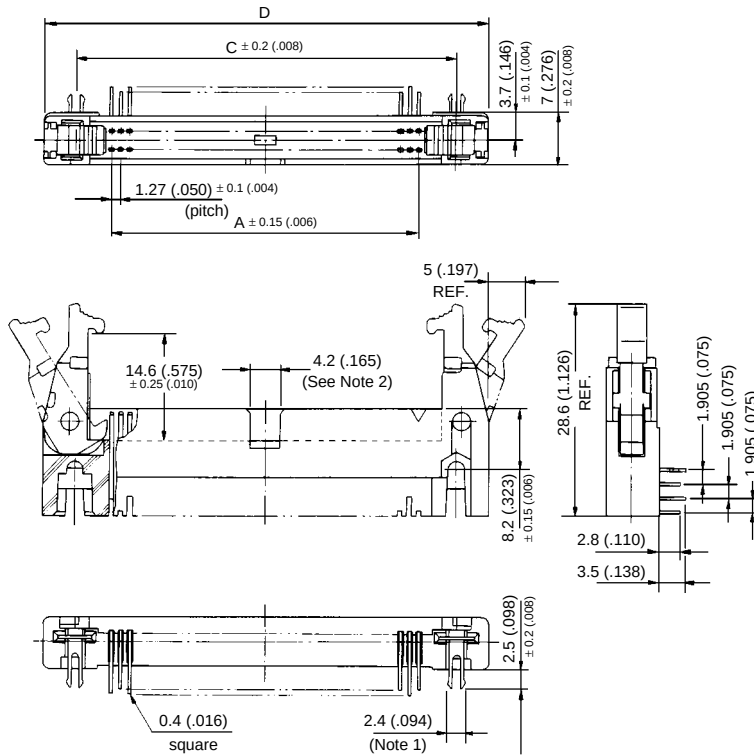
# TX1/TX2/TX3 SERIES CONNECTORS

## 1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors

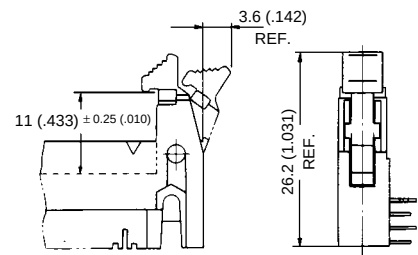
### PIN HEADER WITH LATCHING MECHANISM

#### TX3-LT—Right Angle Through Hole Type

##### STANDARD LATCH TYPE



##### SHORT LATCH TYPE



Note: For short latch type, do not use strain relief on the mating IDC socket connector.

Note 1: Above figure shows the connector with expansion post. Without-expansion-post type is also available.

Note 2: For 80 and 100 position connectors, two polarizing keyways are provided. For other contact arrangement one polarizing keyway is provided at the center.

• Refer to PCB Mounting Hole Dimension Illustration.

| No. of<br>Contacts | Part Number         |                        |                     |                        | A             | C             | D<br>± 0.4 (± .016) |
|--------------------|---------------------|------------------------|---------------------|------------------------|---------------|---------------|---------------------|
|                    | Standard Latch Type |                        | Short Latch Type    |                        |               |               |                     |
|                    | With Expansion Post | Without Expansion Post | With Expansion Post | Without Expansion Post |               |               |                     |
| 20                 | TX3- 20P-D2LT-LH1   | TX3- 20P-D2LT-LN1      | TX3- 20P-D2LT-SH1   | TX3- 20P-D2LT-SN1      | 11.43 ( .450) | 21.59 ( .850) | 30.4 (1.197)        |
| 26                 | TX3- 26P-D2LT-LH1   | TX3- 26P-D2LT-LN1      | TX3- 26P-D2LT-SH1   | TX3- 26P-D2LT-SN1      | 15.24 ( .600) | 25.40 (1.000) | 34.2 (1.346)        |
| 30                 | TX3- 30P-D2LT-LH1   | TX3- 30P-D2LT-LN1      | TX3- 30P-D2LT-SH1   | TX3- 30P-D2LT-SN1      | 17.78 ( .700) | 27.94 (1.100) | 36.8 (1.449)        |
| 34                 | TX3- 34P-D2LT-LH1   | TX3- 34P-D2LT-LN1      | TX3- 34P-D2LT-SH1   | TX3- 34P-D2LT-SN1      | 20.32 ( .800) | 30.48 (1.200) | 39.3 (1.547)        |
| 40                 | TX3- 40P-D2LT-LH1   | TX3- 40P-D2LT-LN1      | TX3- 40P-D2LT-SH1   | TX3- 40P-D2LT-SN1      | 24.13 ( .950) | 34.29 (1.350) | 43.1 (1.697)        |
| 50                 | TX3- 50P-D2LT-LH1   | TX3- 50P-D2LT-LN1      | TX3- 50P-D2LT-SH1   | TX3- 50P-D2LT-SN1      | 30.48 (1.200) | 40.64 (1.600) | 49.5 (1.949)        |
| 60                 | TX3- 60P-D2LT-LH1   | TX3- 60P-D2LT-LN1      | TX3- 60P-D2LT-SH1   | TX3- 60P-D2LT-SN1      | 36.83 (1.450) | 46.99 (1.850) | 55.8 (2.197)        |
| 68                 | TX3- 68P-D2LT-LH1   | TX3- 68P-D2LT-LN1      | TX3- 68P-D2LT-SH1   | TX3- 68P-D2LT-SN1      | 41.91 (1.650) | 52.07 (2.050) | 60.9 (2.398)        |
| 80                 | TX3- 80P-D2LT-LH1   | TX3- 80P-D2LT-LN1      | TX3- 80P-D2LT-SH1   | TX3- 80P-D2LT-SN1      | 49.53 (1.950) | 59.69 (2.350) | 68.5 (2.697)        |
| 100                | TX3- 100P-D2LT-LH1  | TX3- 100P-D2LT-LN1     | TX3- 100P-D2LT-SH1  | TX3- 100P-D2LT-SN1     | 62.23 (2.450) | 72.39 (2.850) | 81.2 (3.197)        |

Dimensions in mm (inches).



# TX1/TX2/TX3 SERIES CONNECTORS

## 1.27mm (.050") Contact Spacing, PCB-to-Cable Connectors

### IDC MACHINE

| Applicable Connector | IDC Machine Part Number (See Note 1) |             | Applicator (See Note 2) | Interchangeable unit (See Note 3) |
|----------------------|--------------------------------------|-------------|-------------------------|-----------------------------------|
|                      | Pneumatic, semi-automatic type       | Hand Type   |                         |                                   |
| TX1                  | SP399-2-TX1                          | SP299-2-TX1 | MT499-TX1-2             | 700-04034-200                     |
| TX2                  | SP399-2-TX2                          | SP299-2-TX2 | MT499-TX2-2             | 700-04041-200                     |

Note 1: With interchangeable applicator.

Note 2: Interchangeable applicator with base plate and pressure unit.

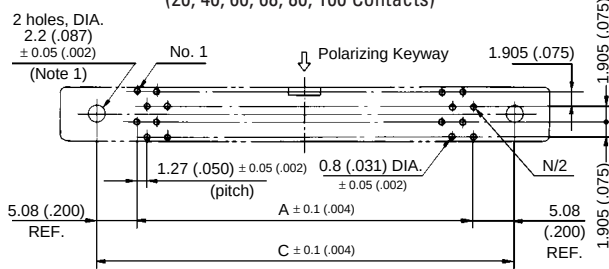
Part number for interchangeable applicator only; 700-04061-100 (TX1/TX2)

Note 3: Base plate and pressure unit only.

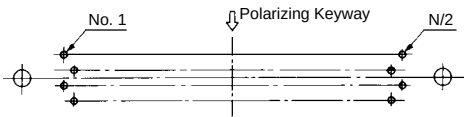
### PCB MOUNTING HOLE DIMENSION (for TX3: pin header with latching mechanism)

#### STRAIGHT PIN HEADER

(20, 40, 60, 68, 80, 100 Contacts)



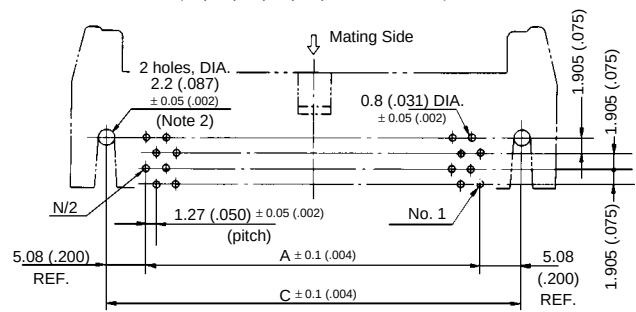
(26, 30, 34, 50 Contacts)



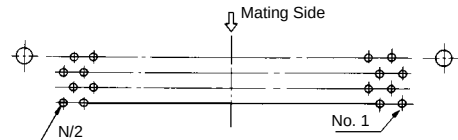
Note 1: 2 holes are not needed for without-expansion-posts type.

#### RIGHT ANGLE PIN HEADER

(20, 40, 60, 68, 80, 100 Contacts)



(26, 30, 34, 50 Contacts)



Note 2: 2.2<sup>+0.2</sup><sub>-0</sub> (.087<sup>+0.008</sup><sub>-0</sub>) dia. for without-expansion-posts type.  
(applicable screw: M2)

| No. of Contacts | A<br>± 0.1 (.004) | C<br>± 0.1 (.004) |
|-----------------|-------------------|-------------------|
| 20              | 11.43 ( .450)     | 21.59 ( .850)     |
| 26              | 15.24 ( .600)     | 25.40 (1.000)     |
| 30              | 17.78 ( .700)     | 27.94 (1.100)     |
| 34              | 20.32 ( .800)     | 30.48 (1.200)     |
| 40              | 24.13 ( .950)     | 34.29 (1.350)     |
| 50              | 30.48 (1.200)     | 40.64 (1.600)     |
| 60              | 36.83 (1.450)     | 46.99 (1.850)     |
| 68              | 41.91 (1.650)     | 52.07 (2.050)     |
| 80              | 49.53 (1.950)     | 59.69 (2.350)     |
| 100             | 62.23 (2.450)     | 72.39 (2.850)     |

Dimensions in mm (inches).