

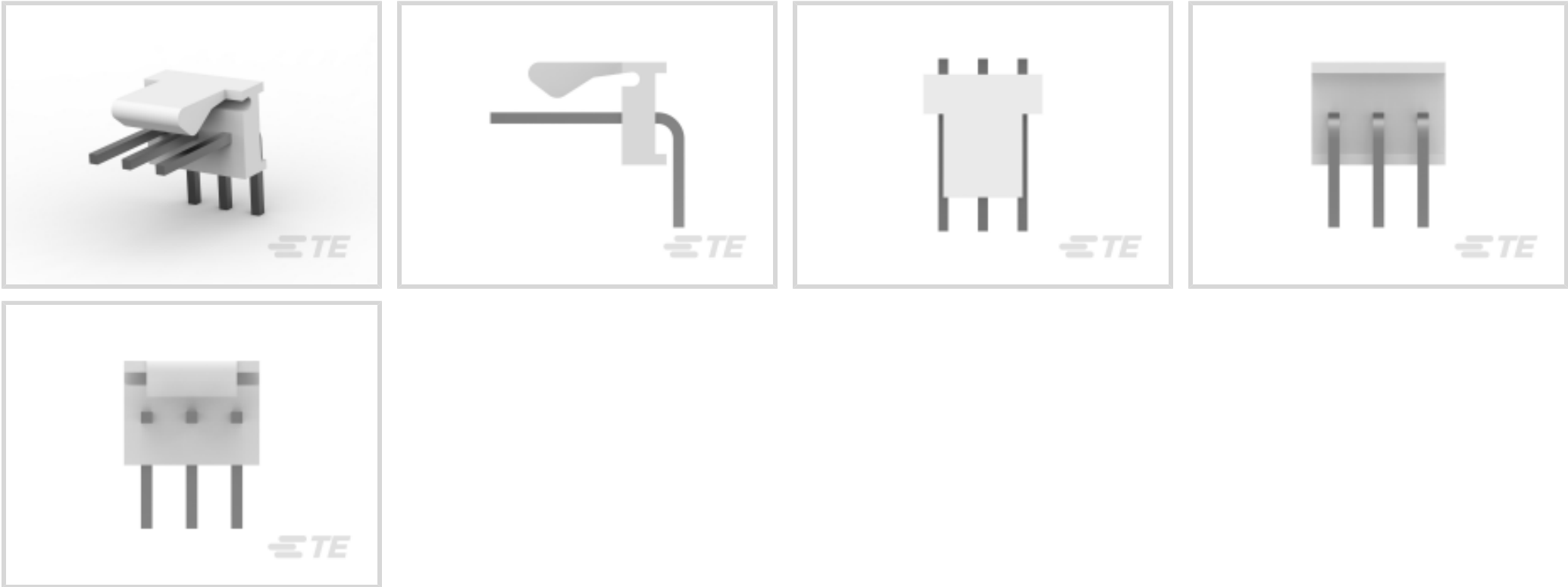


MTA 100

TE Internal #: 640457-3  
PCB Mount Header, Right Angle, Wire-to-Board, 3 Position, 2.54 mm [.1 in] Centerline, Partially Shrouded, Tin, Through Hole - Solder, Signal, MTA 100

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles > MTA Header: Polyester Right Angle Unshr.



Connector System: **Wire-to-Board**  
Number of Positions: **3**  
Number of Rows: **1**  
Centerline (Pitch): **2.54 mm [.1 in]**  
PCB Mount Orientation: **Right Angle**

[All MTA Header: Polyester Right Angle Unshr. \(257\)](#)

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Connector System                  | Wire-to-Board         |
| Header Type                       | Partially Shrouded    |
| Sealable                          | No                    |
| Connector & Contact Terminates To | Printed Circuit Board |
| PCB Connector Assembly Type       | PCB Mount Header      |

Configuration Features

|                       |             |
|-----------------------|-------------|
| Number of Positions   | 3           |
| Number of Rows        | 1           |
| PCB Mount Orientation | Right Angle |

Electrical Characteristics

|                   |         |
|-------------------|---------|
| Operating Voltage | 250 VAC |
|-------------------|---------|

Body Features

|  |  |
|--|--|
|  |  |
|--|--|



|                       |         |
|-----------------------|---------|
| Primary Product Color | Natural |
|-----------------------|---------|

Contact Features

|                                                         |                  |
|---------------------------------------------------------|------------------|
| Contact Layout                                          | Inline           |
| Contact Mating Area Length                              | 7.49 mm[.295 in] |
| Mating Square Post Dimension                            | .64 mm[.025 in]  |
| PCB Contact Termination Area Plating Material Thickness | 3.81 μm[150 μin] |
| Contact Underplating Material Thickness                 | 1.27 μm[50 μin]  |
| Contact Mating Area Plating Material Thickness          | 3.81 μm[150 μin] |
| Contact Shape & Form                                    | Square           |
| Contact Mating Area Plating Material Finish             | Matte            |
| Contact Underplating Material                           | Nickel           |
| PCB Contact Termination Area Plating Material           | Tin              |
| Contact Base Material                                   | Copper Alloy     |
| Contact Mating Area Plating Material                    | Tin              |
| Contact Type                                            | Pin              |
| Contact Current Rating (Max)                            | 5 A              |

Termination Features

|                                             |                       |
|---------------------------------------------|-----------------------|
| Square Termination Post & Tail Dimension    | .64 mm[.025 in]       |
| Termination Post & Tail Length              | 3.56 mm[.14 in]       |
| Termination Method to Printed Circuit Board | Through Hole - Solder |

Mechanical Attachment

|                         |               |
|-------------------------|---------------|
| Mating Alignment Type   | Polarization  |
| Mating Retention        | With          |
| Panel Mount Feature     | Without       |
| Mating Retention Type   | Friction Lock |
| Connector Mounting Type | Board Mount   |
| Mating Alignment        | With          |
| PCB Mount Alignment     | Without       |
| PCB Mount Retention     | Without       |

Housing Features

|                          |                |
|--------------------------|----------------|
| Right Angle Bending Side | Front          |
| Housing Material         | Polyester - GF |
| Centerline (Pitch)       | 2.54 mm[.1 in] |



Dimensions

|                             |                 |
|-----------------------------|-----------------|
| Connector Length            | 10.16 mm[.4 in] |
| Connector Height            | 7.87 mm[.31 in] |
| PCB Thickness (Recommended) | 1.6 mm[.063 in] |

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -55 – 105 °C[-67 – 221 °F] |
|-----------------------------|----------------------------|

Operation/Application

|                     |        |
|---------------------|--------|
| Circuit Application | Signal |
|---------------------|--------|

Industry Standards

|                        |                       |
|------------------------|-----------------------|
| CSA Rating             | Certified             |
| Agency/Standard        | CSA, UL               |
| Approved Standards     | CSA LR7189, UL E28476 |
| UL Flammability Rating | UL 94V-0              |

Packaging Features

|                    |         |
|--------------------|---------|
| Packaging Quantity | 1       |
| Packaging Type     | Package |

Product Compliance

For compliance documentation, visit the product page on TE.com>

|                                               |                                                                                                                                 |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Compliant                                                                                                                       |
| EU ELV Directive 2000/53/EC                   | Compliant                                                                                                                       |
| China RoHS 2 Directive MIIT Order No 32, 2016 | No Restricted Materials Above Threshold                                                                                         |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JUNE 2022 (224)<br>Candidate List Declared Against: JUNE 2022 (224)<br>Does not contain REACH SVHC |
| Halogen Content                               | Not Low Halogen - contains Br or Cl > 900 ppm.                                                                                  |
| Solder Process Capability                     | Wave solder capable to 265°C                                                                                                    |

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these





limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

### Compatible Parts

TE Part # CAT-104MTA-NTPMR  
MTA Receptacle: Nylon Tin Plated, MA

TE Part # CAT-104MTA-NTPNR  
MTA Receptacle: Nylon Tin Plated, No MA

TE Part # CAT-104MTA-NYLCC  
MTA 100 Connector Cover: Nylon

TE Part # CAT-104MTA-PLSCC  
MTA 100 Connector Cover: Polyester

TE Part # 1375820-3  
CST-100 II HOUSING 3 POS

### Also in the Series | MTA 100

Insertion & Extraction Tools(2)

PCB Connector Covers(107)

PCB Connector Keying(1)

PCB Headers & Receptacles(1182)

Standard Rectangular Connectors  
(1718)

Wire-to-Board Connector Assemblies  
& Housings(1)

Wire-to-Board Connector Contacts(18)

### Customers Also Bought



TE Part #640457-5  
05P MTA100 HDR ASSY SQ R/A F/L

TE Part #640456-3  
03P MTA100 HDR ASSY F/L SQ STR

TE Part #640387-7  
07P MTA156 HDR ASSY SQ R/A

TE Part #5-103634-4  
05 MTE HDR SRRA LATCH.100CL LF

TE Part #2176091-3  
RP 2A 0.25W 60R4 0.1% 25PPM 1K RL

TE Part #2204440-7  
MULTI-BEAM HD R/A PLUG  
15S+3P+12S

TE Part #1-2176349-4  
CRGCQ 2512 120R 1%

TE Part #6-1879207-4  
RN 0603 453K 0.1% 10PPM 5K RL

TE Part #2205209-1  
FSN-11.5A-5

Documents

Product Drawings

03P MTA100 HDR ASSY SQ R/A F/L

English

CAD Files

Customer View Model

ENG\_CVM\_640457-3\_S.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_640457-3\_S.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_640457-3\_S.3d\_stp.zip

English

3D PDF

English

3D PDF

3D



Customer View Model

[ENG\\_CVM\\_CVM\\_640457-3\\_W.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_640457-3\\_W.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_640457-3\\_W.3d\\_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

[MTA, CST-100 II, SL-156 and AMP Economy Power \(EP\) Connectors](#)

English

Product Environmental Compliance

[MD\\_640457-3\\_112020172036\\_dmtec](#)

English

[MD\\_640457-3\\_112020172036\\_dmtec](#)

English

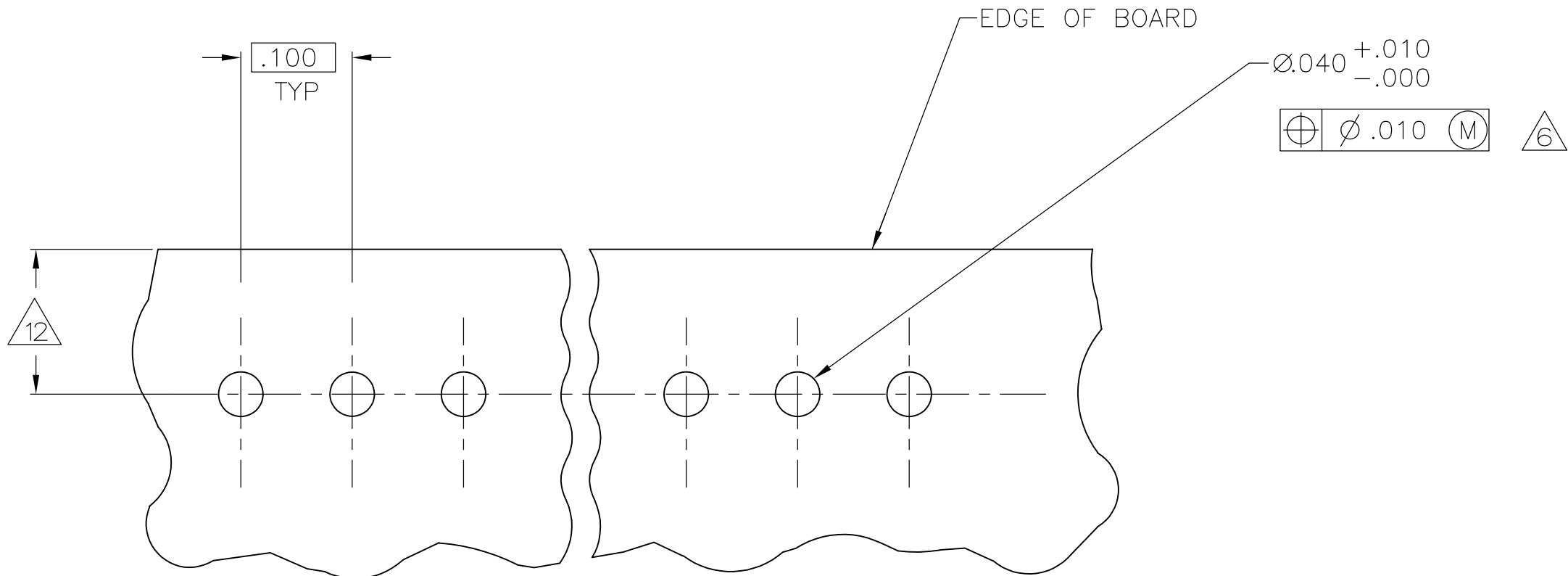
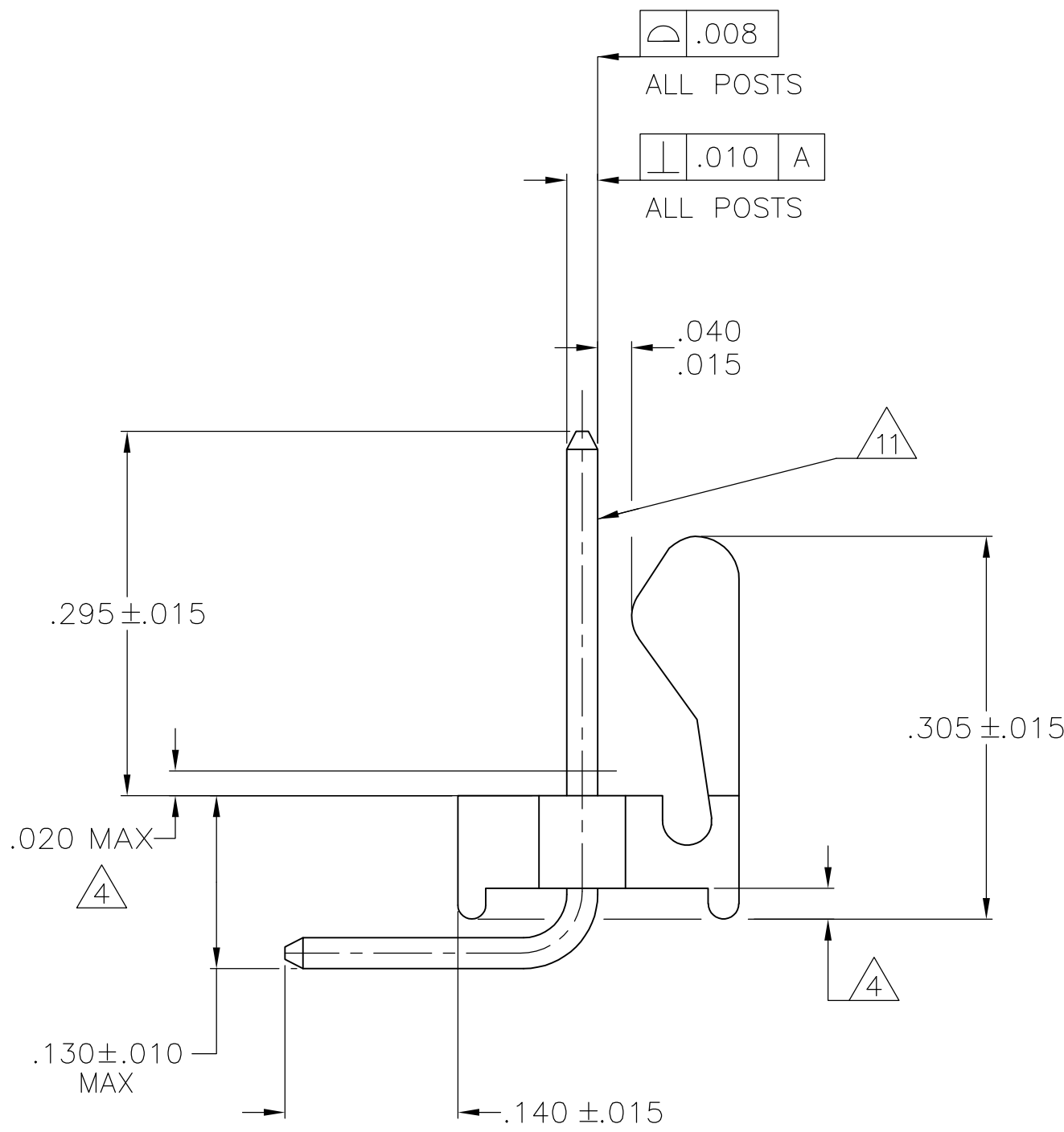
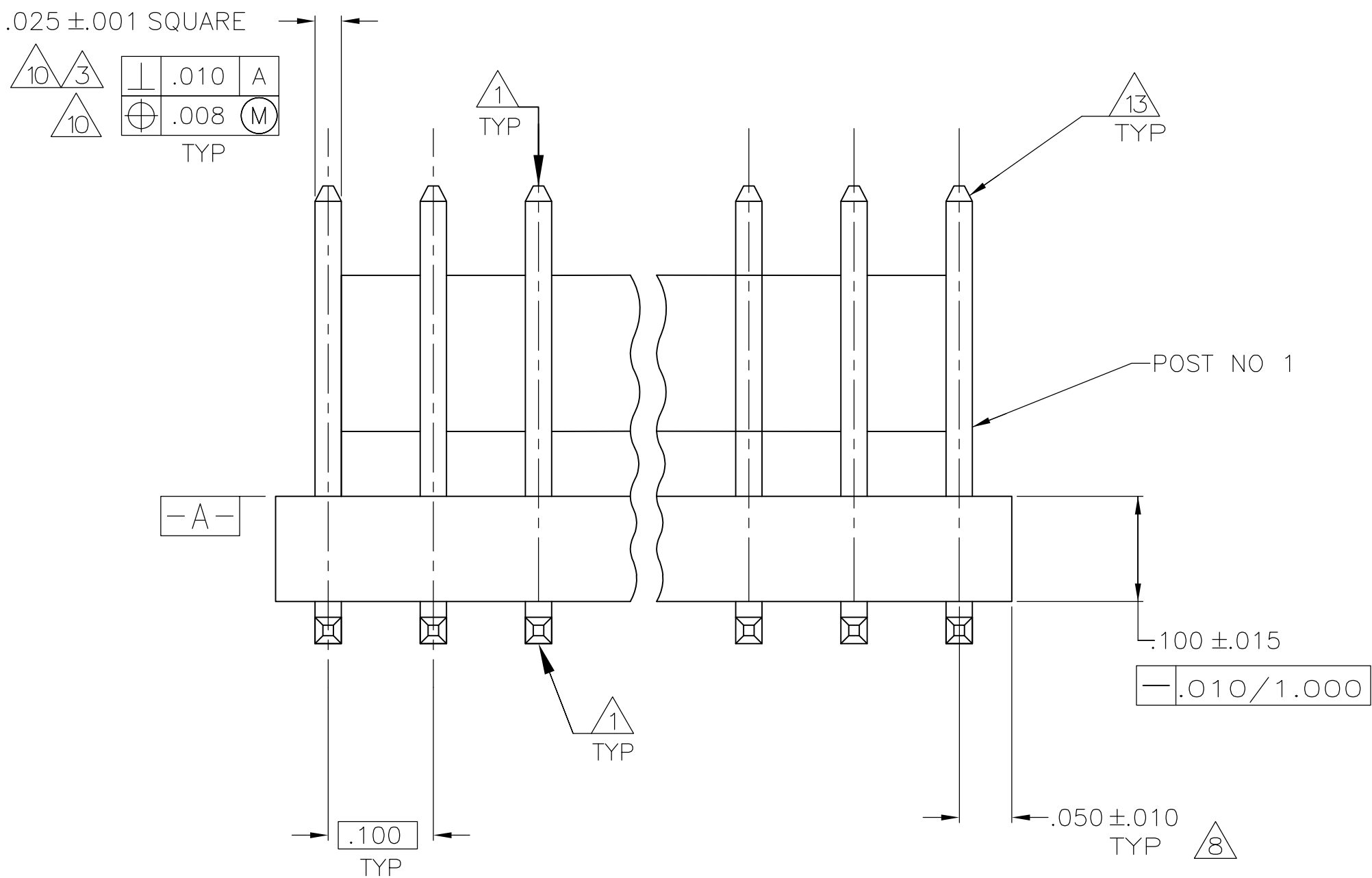
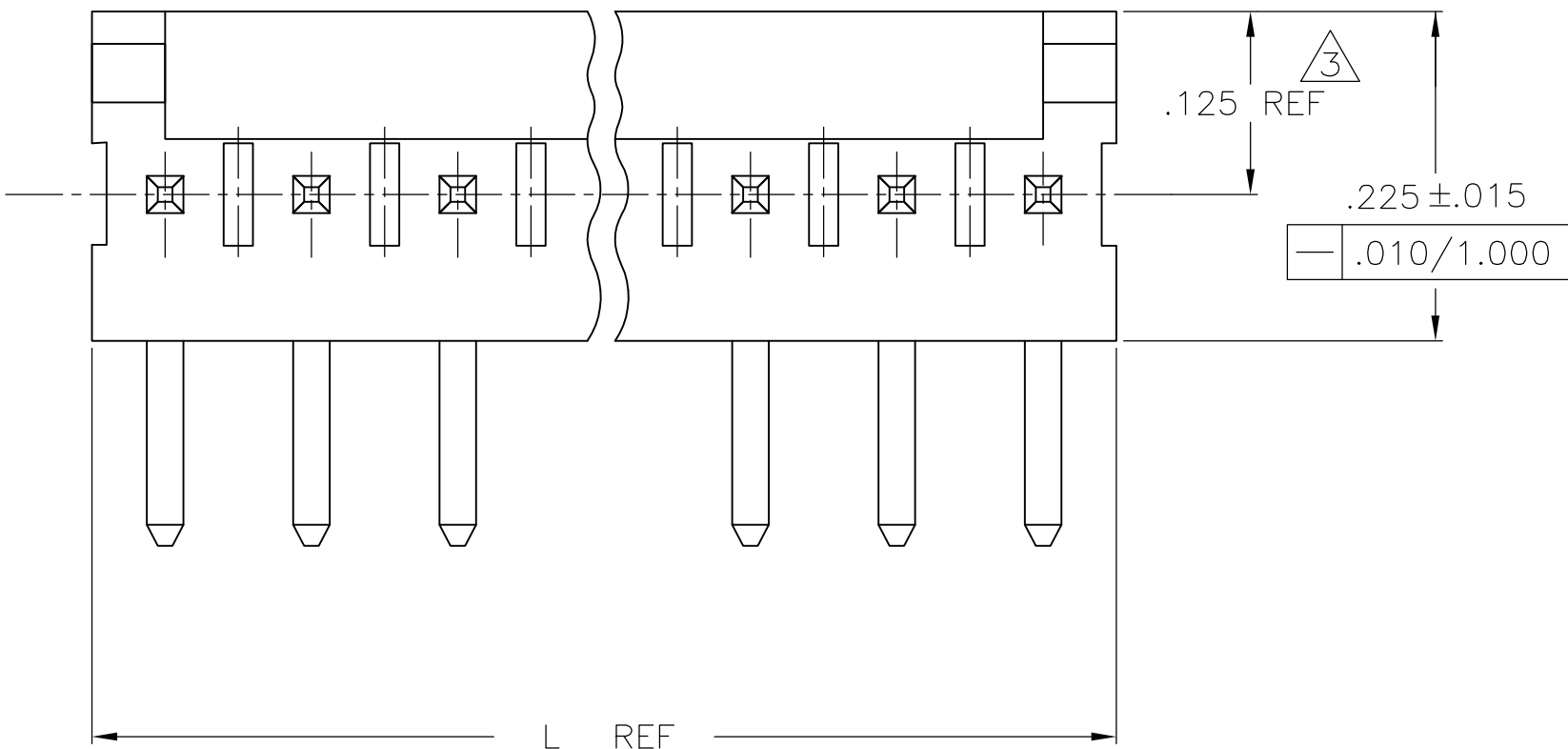
Agency Approvals

[UL](#)

English



| REVISIONS |     |                           |           |     |      |
|-----------|-----|---------------------------|-----------|-----|------|
| P         | LTR | DESCRIPTION               | DATE      | DWN | APVD |
|           | S3  | REVISED PER ECR-15-014064 | 18MAY2016 | NK  | NL   |



- 1
- POST TO WITHSTAND 13 NEWTONS (3LBS.) MIN. AXIAL FORCE IN BOTH DIRECTIONS SHOWN WITHOUT DISLODGING.
- 2
- TOLERANCES APPLY TO SOLDER SIDE OF BOARD.
- 3
- MEASURED AT SURFACE -A-
- 4
- PLASTIC FLASH PERMITTED IN THIS AREA.
- 5
- PARTS COMPLY WITH AMP SOLDERABILITY SPEC. NO. 109-11-2.
- 6
- ONE HOLE MAY BE UNDERSIZED (Ø.035/.032) FOR ASSEMBLY RETENTION DURING WAVE SOLDERING.
- 7
- MATERIAL: HEADER-THERMOPLASTIC POLYESTER 94V-0(NATURAL) POST-COPPER ALLOY (TIN PLATED)
- 8
- COORDINATE DIMENSION APPLIES FROM CENTER OF ACTUAL FEATURE.
- 9
- PLASTIC BURRS CAUSED BY CUT-OFF TOOLING ARE PERMITTED WITHIN THE MAXIMUM TOLERANCE ENVELOPE.
- 10
- POST TO BE MEASURED WHEN STRIP IS HELD FLAT.
- 11
- POST MUST WITHSTAND TWO 90° BENDS AGAINST EXTRUSION WITHOUT BREAKING.
- 12
- DIMENSION SHOULD BE .110-.160 WHEN MATING WITH A MTA 100 CONNECTOR ASSEMBLY OR .110-.120 WHEN MATING WITH A CST 100 CONNECTOR.
- 13
- PIN BURR OF .005 MAX. VERTICAL AND .003 MAX. HORIZONTAL PERMITTED AT POST TIPS ON BOTH ENDS.

|                  |      | 1.000 | 25.40 |
|------------------|------|-------|-------|
| .040             | 1.02 | .310  | 7.87  |
| .035             | 0.89 | .295  | 7.49  |
| .032             | 0.81 | .225  | 5.72  |
| .025             | 0.64 | .160  | 4.06  |
| .020             | 0.51 | .140  | 3.56  |
| .015             | 0.38 | .125  | 3.18  |
| .010             | 0.25 | .120  | 3.05  |
| .008             | 0.20 | .110  | 2.79  |
| .005             | 0.13 | .100  | 2.54  |
| .003             | 0.08 | .063  | 1.60  |
| .001             | 0.03 | .050  | 1.27  |
| IN               | MM   | IN    | MM    |
| CONVERSION TABLE |      |       |       |

|       |       |                 |             |
|-------|-------|-----------------|-------------|
| 2.800 | 71.12 | 28              | 2-640457-8  |
| 2.700 | 68.58 | 27              | 2-640457-7  |
| 2.600 | 66.04 | 26              | 2-640457-6  |
| 2.500 | 63.50 | 25              | 2-640457-5  |
| 2.400 | 60.96 | 24              | 2-640457-4  |
| 2.300 | 58.42 | 23              | 2-640457-3  |
| 2.200 | 55.88 | 22              | 2-640457-2  |
| 2.100 | 53.34 | 21              | 2-640457-1  |
| 2.000 | 50.80 | 20              | 2-640457-0  |
| 1.900 | 48.26 | 19              | 1-640457-9  |
| 1.800 | 45.72 | 18              | 1-640457-8  |
| 1.700 | 43.18 | 17              | 1-640457-7  |
| 1.600 | 40.64 | 16              | 1-640457-6  |
| 1.500 | 38.10 | 15              | 1-640457-5  |
| 1.400 | 35.56 | 14              | 1-640457-4  |
| 1.300 | 33.02 | 13              | 1-640457-3  |
| 1.200 | 30.48 | 12              | 1-640457-2  |
| 1.100 | 27.94 | 11              | 1-640457-1  |
| 1.000 | 25.40 | 10              | 1-640457-0  |
| .900  | 22.86 | 9               | 640457-9    |
| .800  | 20.32 | 8               | 640457-8    |
| .700  | 17.78 | 7               | 640457-7    |
| .600  | 15.24 | 6               | 640457-6    |
| .500  | 12.70 | 5               | 640457-5    |
| .400  | 10.16 | 4               | 640457-4    |
| .300  | 7.62  | 3               | 640457-3    |
| .200  | 5.08  | 2               | 640457-2    |
| IN    | MM    | NO OF POSITIONS | PART NUMBER |

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN B. LEWIS 2-12-93  
CHK R. SWING 2-12-93  
APVD R. SPEER 3-11-93  
PRODUCT SPEC

DIMENSIONS: INCHES  
TOLERANCES UNLESS OTHERWISE SPECIFIED:  
0. PLC ± -  
1. PLC ± -  
2. PLC ± -  
3. PLC ± .005  
4. PLC ± -  
ANGLES ± -

Ø.040 +.010  
-.000

Ø.010 (M) 6

MATERIAL 7  
FINISH 7

WEIGHT -  
CUSTOMER DRAWING

SIZE 8:1  
SHEET 1 OF 1  
REV S3

TE Connectivity  
MTA 100 HDR ASSY, FRICTION LOCK, NOTCHED, .025 SQUARE RIGHT ANGLE POST, TIN PLATED  
A1 00779 640457