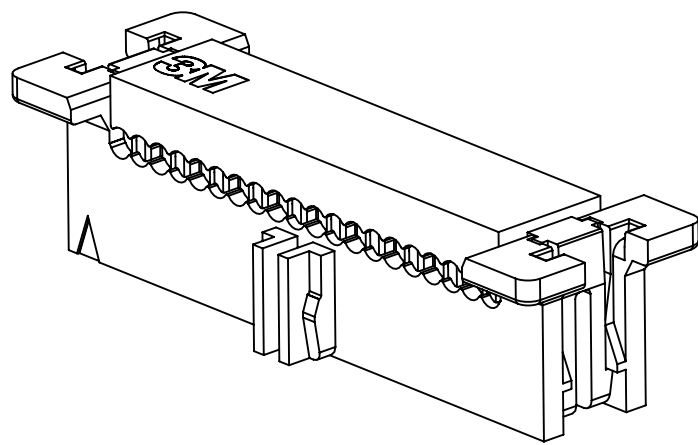
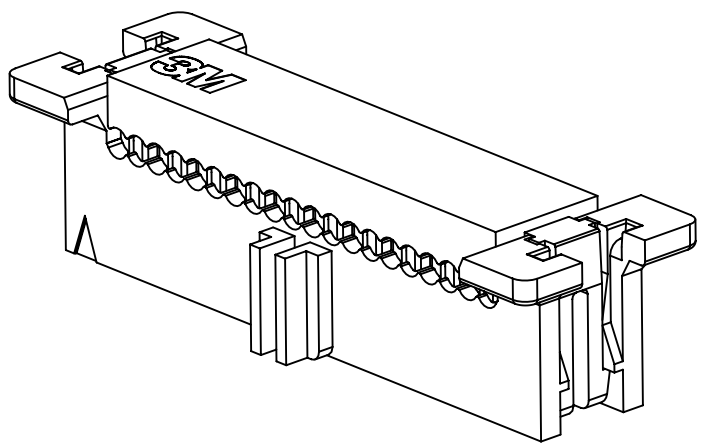


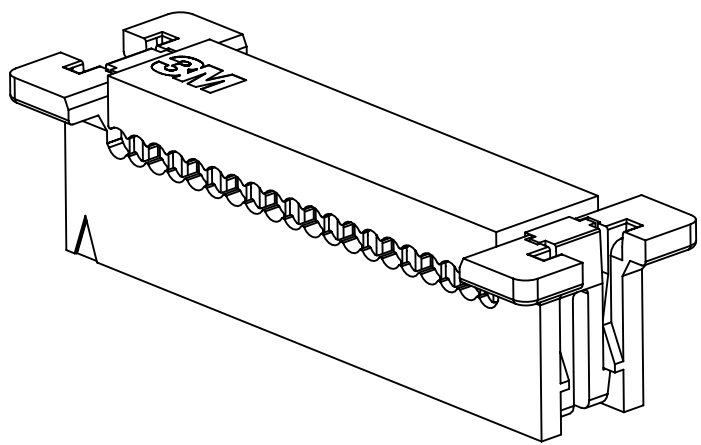
3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY,  
1.27mm (0.050") PITCH, 451 SERIES



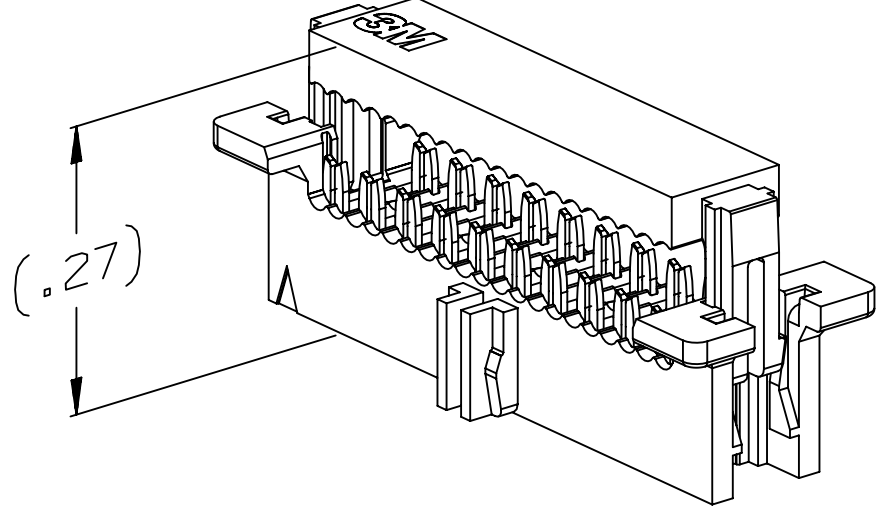
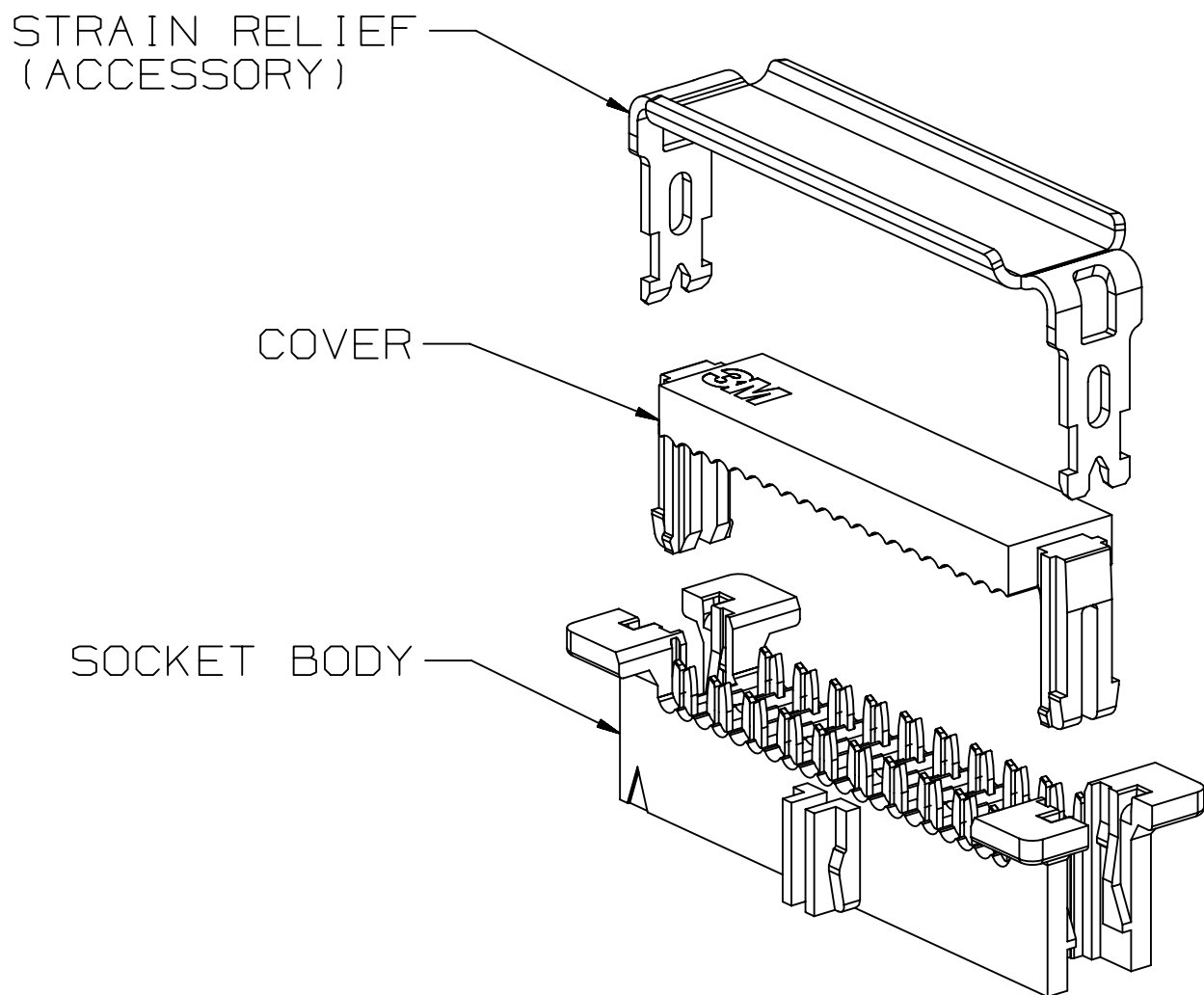
CENTER POLARIZATION  
AND FRICTION LATCH



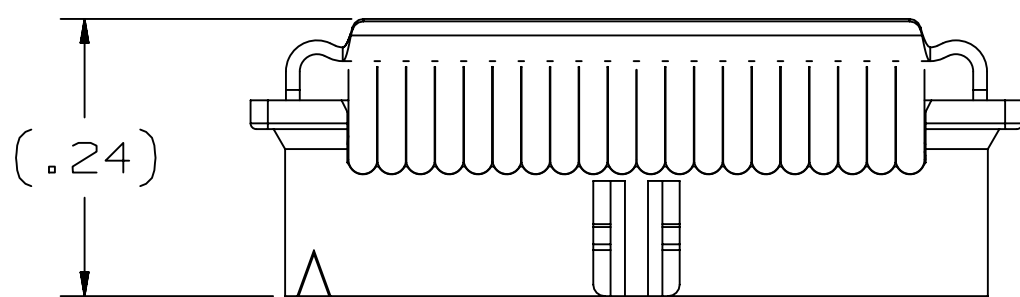
CENTER POLARIZATION  
AND NO FRICTION LATCH



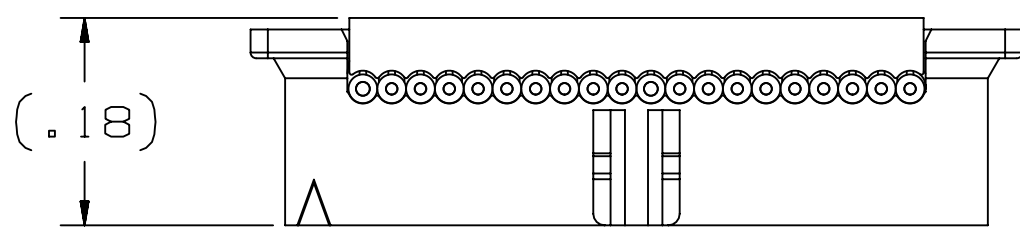
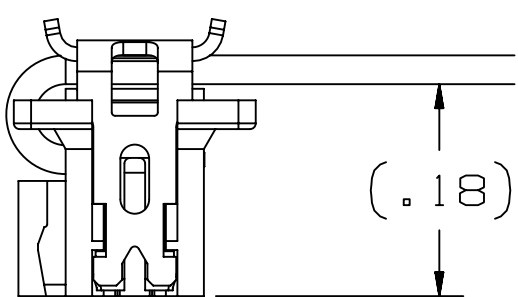
NO CENTER POLARIZATION  
AND NO FRICTION LATCH



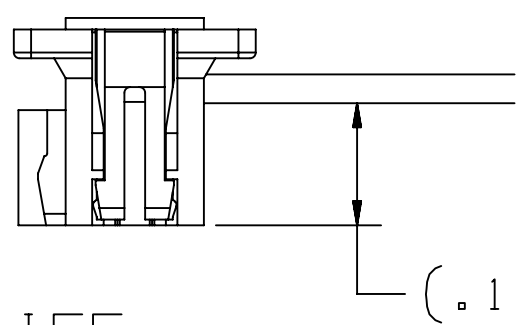
PRE-POSITIONED COVER



WITH OPTIONAL  
STRAIN RELIEF



NO STRAIN RELIEF



TERMINATED  
CONNECTOR

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION  
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INFORMATION CALL 800-225-5373

| PERFORMANCE:                    |                                                                                                                                                                                                                                                                               |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CURRENT RATING:                 | 1.0A, UL 04P-50P, NOT FOR CURRENT INTERRUPTION<br>1.0A, CUL 04P-30P, NOT FOR CURRENT INTERRUPTION<br>0.75A, CUL 32P-50P, NOT FOR CURRENT INTERRUPTION<br>0.75A, ALL LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70<br>1.50A, 6 LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70 |
| UL & CUL VOLTAGE RATING:        | 125V <sub>ac</sub>                                                                                                                                                                                                                                                            |
| INSULATION RESISTANCE:          | > 1 × 10 <sup>9</sup> Ohms AT 500 VDC                                                                                                                                                                                                                                         |
| WITHSTANDING VOLTAGE:           | 1250V <sub>dc</sub> AT SEA LEVEL                                                                                                                                                                                                                                              |
| OPERATING TEMPERATURE:          | -65°C TO +125°C                                                                                                                                                                                                                                                               |
| UL & CUL OPERATING TEMPERATURE: | +130°C                                                                                                                                                                                                                                                                        |

- NOTES
- MATERIAL:  
BODY: PBT, UL94V-0  
COVER: PBT, UL94V-0  
STRAIN RELIEF: STAINLESS STEEL  
CONTACTS: BeCu ALLOY.
  - PLATING:  
50-150μ" NICKEL UNDERPLATE  
30 = 30μ" MIN. GOLD ON WIPING AREA  
00 = FLASH GOLD ON WIPING AREA.
  - RIBBON CABLE COMPATIBILITY:  
GENERAL:  
0.025" PITCH PVC, 30 AWG, SOLID OR 7 STRAND.  
RECOMMENDED:  
3M 3447 AND 3754 SERIES CABLE.
  - MATING COMPATIBILITY:  
3M 1.27mm (0.050"), SERIES 452 HEADER WITH LATCH/EJECT OPTION. TECH SHEETS TS-2437 AND TS-2396
  - REGULATORY INFORMATION:  
VISIT [3M.com/regs](http://3M.com/regs)
  - IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
  - REFERENCE RELATED DOCUMENTS:  
PRODUCT SPECIFICATION:  
3M DOC. ID# 78-5102-0091-4.
  - TOOLING AND INSTALLATION INSTRUCTIONS:  
3M DOC. ID# 78-9101-8937-8.
  - OTHER PIN COUNTS AVAILABLE UPON REQUEST. CONTACT 3M.
  - PACKAGING:  
SOCKET: TRAY  
COVER: BAG

ORDERING INFORMATION  
FOR RAPID INSTALLATION ON  
RIBBON CABLE APPLICATIONS

451 XX - 0 X 0 0 XX  
SERIES  
NUMBER OF POSITIONS  
SEE TABLE 1  
PLATING  
00 = AU FLASH  
30 = 30μ" GOLD  
OPTIONAL FEATURES  
0 = NONE SPECIFIED  
PACKAGING  
0 = STANDARD (TRAYS)

CENTER POLARIZATION / FRICTION LATCH  
0 = NO CENTER POLARIZATION (CP) (ALL POS.)  
1 = CP NO FRICTION LATCH (08 AND HIGHER POS.)  
2 = CP WITH FRICTION LATCH (08 AND HIGHER POS.)

NOTE:  
FRICTION LATCH (OPTION 2) IS NOT SUITABLE  
FOR HEADER WITH LATCH EJECT OPTION

ACCESSORY: STRAIN RELIEF  
3448-451XX

NUMBER OF POSITIONS

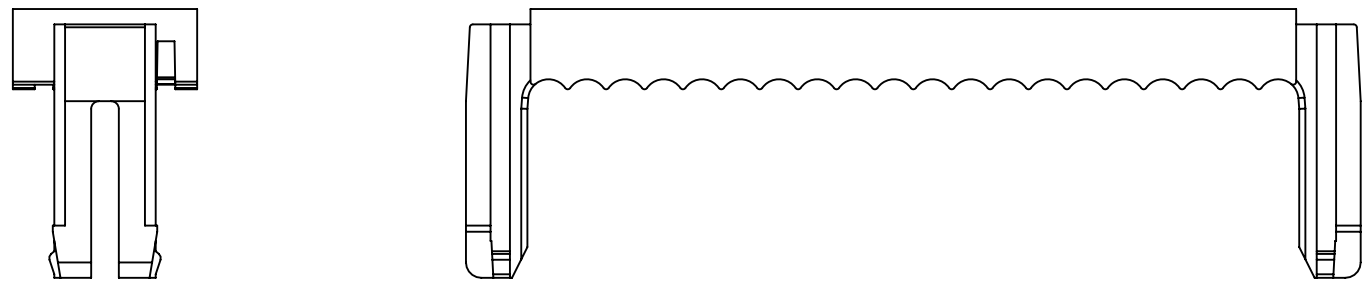
APPLICATION TOOLING:  
ALUMINUM: 3443-82-XX

NUMBER OF POSITIONS

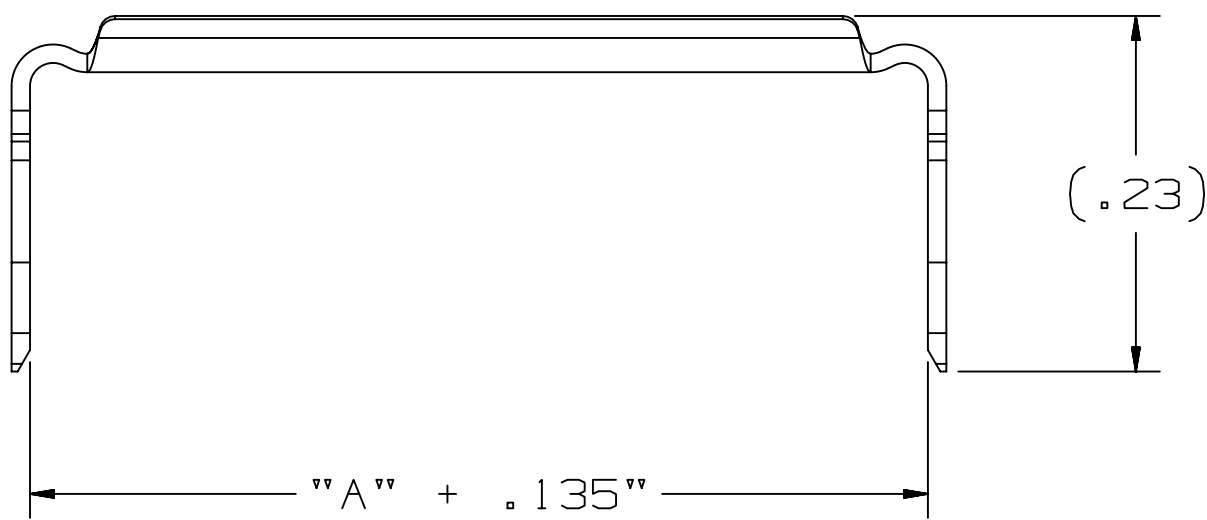
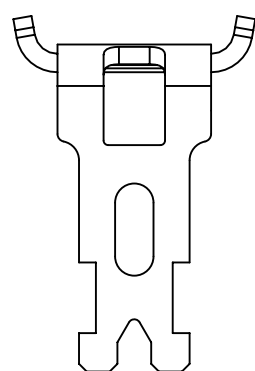
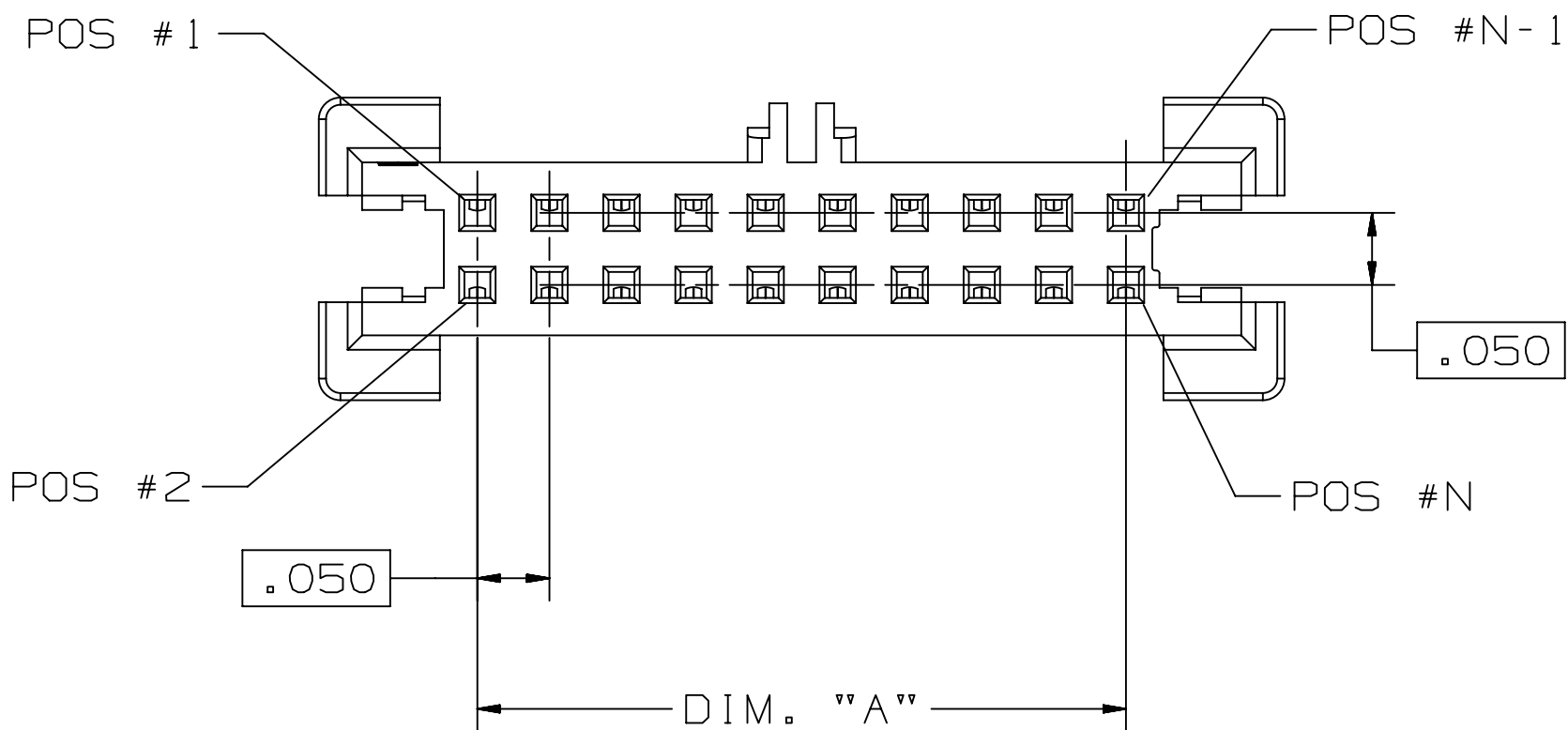
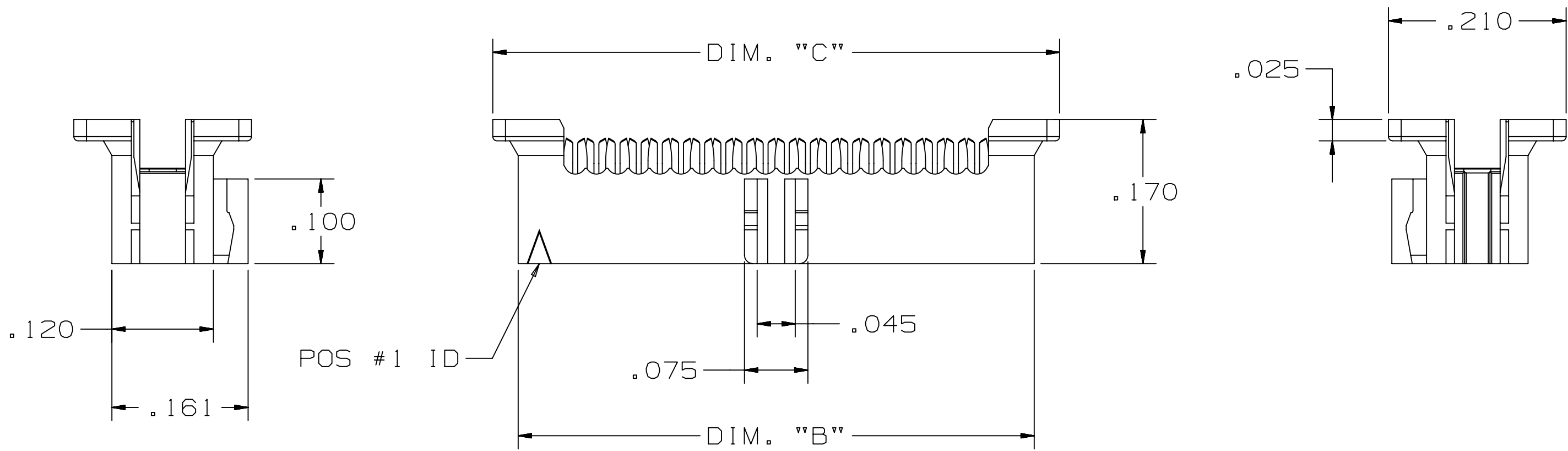
|                                                   |  |                                                    |  |                                                 |  |                             |  |                                                                                                                                                                                                                                                           |  |             |  |                                            |  |              |  |
|---------------------------------------------------|--|----------------------------------------------------|--|-------------------------------------------------|--|-----------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------|--|--------------------------------------------|--|--------------|--|
| 78-5100-2396-9<br>78-5100-2437-1                  |  | NEXT ASSEMBLY                                      |  | REV                                             |  | ECO                         |  | PRODUCTION RELEASE                                                                                                                                                                                                                                        |  |             |  | DRFT                                       |  | CHKD         |  |
| DESIGN REFERENCE                                  |  | NEXT ASSEMBLY                                      |  | DRFT                                            |  | ARM                         |  | DATE 11,2011                                                                                                                                                                                                                                              |  |             |  | MFO                                        |  | DATE         |  |
| DESIGN CODES                                      |  | DESIGN CODES                                       |  | CHKD                                            |  | CHKD                        |  | DATE                                                                                                                                                                                                                                                      |  |             |  | APPN                                       |  | DATE 11,2011 |  |
| DIVISION                                          |  | DIVISION CODE<br>EMSD                              |  | 3M<br>St. Paul,<br>MN 55144                     |  | 3M<br>St. Paul,<br>MN 55144 |  | © 3M COPYRIGHT 2022<br>This document and the information it contains are 3M property and may not be reproduced or further distributed without the express 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved. |  |             |  |                                            |  |              |  |
| DO NOT SCALE DRAWING                              |  | SCALE<br>1                                         |  | TOLERANCES EXCEPT AS NOTED                      |  | TITLE                       |  | RIBBON CABLE WMT SOCKET , .05 X .05 PITCH , 451 SERIES                                                                                                                                                                                                    |  |             |  |                                            |  |              |  |
| THIRD ANGLE PROJECTION                            |  | INCHES<br>.01 ± .02<br>.000 ± .010<br>.0000 ± .005 |  | MILLIMETERS<br>0 ±<br>.00 ±<br>.000 ±<br>.000 ± |  | CAGE NUMBER                 |  | SIZE                                                                                                                                                                                                                                                      |  | DRAWING NO. |  | REV.                                       |  | J            |  |
| INTERPRET PER ASME Y14.5 - 2018                   |  | MAX. SURFACE ROUGHNESS                             |  | ALL SURFACES                                    |  | MODEL                       |  | 451                                                                                                                                                                                                                                                       |  | DET. LISTS  |  | YES <input checked="" type="checkbox"/> NO |  | SHT 1 OF 2   |  |
| ✓ <input checked="" type="checkbox"/> MARKED ONLY |  | ANGLES ±                                           |  |                                                 |  |                             |  |                                                                                                                                                                                                                                                           |  |             |  |                                            |  |              |  |

UL FILE NO: E68080

3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY,  
1.27mm (0.050") PITCH, 451 SERIES



COVER



ACCESSORY - STRAIN RELIEF  
PART NUMBER 3448-451XX

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TABLE 1

| No. Positions | Dim "A" | Dim "B" | Dim "C" |
|---------------|---------|---------|---------|
| 4             | .050    | .210    | .270    |
| 6             | .100    | .260    | .320    |
| 8             | .150    | .310    | .370    |
| 10            | .200    | .360    | .420    |
| 12            | .250    | .410    | .470    |
| 14            | .300    | .460    | .520    |
| 16            | .350    | .510    | .570    |
| 20            | .450    | .610    | .670    |
| 26            | .600    | .760    | .820    |
| 30            | .700    | .860    | .920    |
| 40            | .950    | 1.110   | 1.170   |
| 50            | 1.200   | 1.360   | 1.420   |

|                                  |  |                                 |  |                                               |  |                                                   |     |                              |  |                                                      |      |
|----------------------------------|--|---------------------------------|--|-----------------------------------------------|--|---------------------------------------------------|-----|------------------------------|--|------------------------------------------------------|------|
| 78-5100-2396-9<br>78-5100-2437-1 |  | DESIGN REFERENCE                |  | NEXT ASSEMBLY                                 |  | REV                                               | ECO | ISSUE DATE AND DESCRIPTION   |  | DRFT                                                 | CHKD |
| XREF                             |  | DIVISION                        |  | DIVISION CODE                                 |  | DRFT                                              | ARM | DATE                         |  | MFG                                                  | DATE |
| CODES                            |  | EMSD                            |  | EMSD                                          |  | CHKD                                              | ARM | DATE                         |  | APPR                                                 | DATE |
| DIVISION                         |  | EMSD                            |  | EMSD                                          |  | CHKD                                              | ARM | DATE                         |  | APPR                                                 | DATE |
| DO NOT SCALE DRAWING             |  | SCALE 4 1                       |  | TOLERANCES EXCEPT AS NOTED                    |  | 3M                                                |     | 3M Center St. Paul, MN 55144 |  | © 3M COPYRIGHT 2022                                  |      |
| THIRD ANGLE PROJECTION           |  | INTERPRET PER ASME Y14.5 - 2018 |  | INCHES .0 ±.1 .00 ±.02 .000 ±.010 .0000 ±.005 |  | MILLIMETERS 0 ±.1 .00 ±.02 .000 ±.010 .0000 ±.005 |     | TITLE                        |  | RIBBON CABLE WMT SOCKET, .05 X .05 PITCH, 451 SERIES |      |
| MAX. SURFACE ROUGHNESS           |  | ALL SURFACES                    |  | MARKED ONLY                                   |  | CAGE NUMBER                                       |     | DRAWING NO.                  |  | REV.                                                 |      |
| ✓                                |  | ✓                               |  | ✓                                             |  | D                                                 |     | 78-5100-2436-3               |  | J                                                    |      |
| MODEL                            |  | 451                             |  | LISTS                                         |  | YES                                               |     | NO                           |  | SHT 2 OF 2                                           |      |