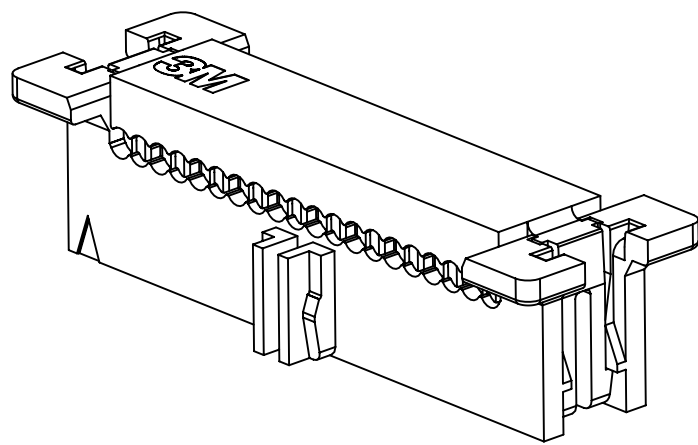
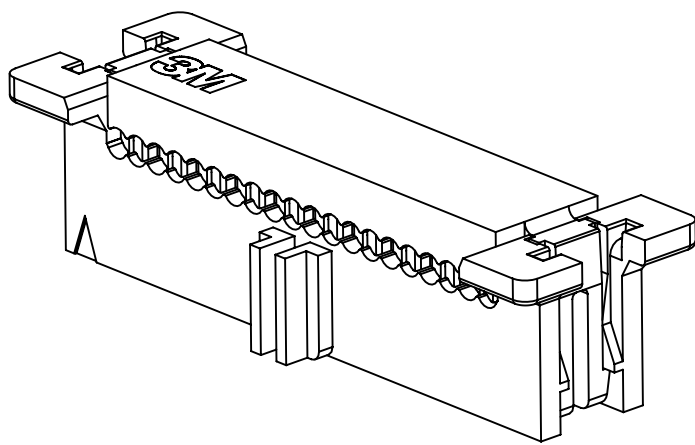


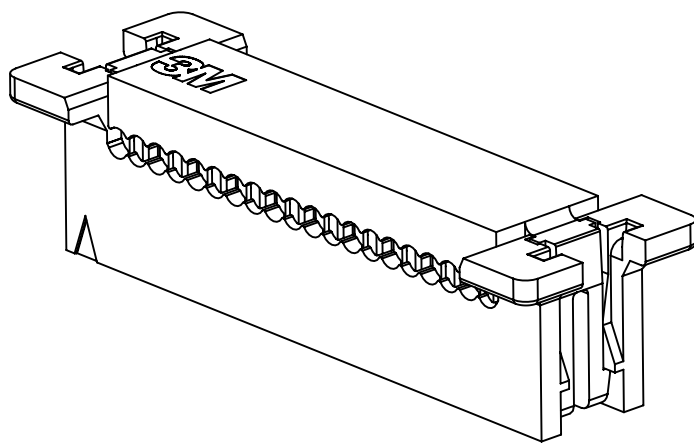
3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY,  
.05" X .05" (1.27mm X 1.27mm) PITCH, 451 SERIES



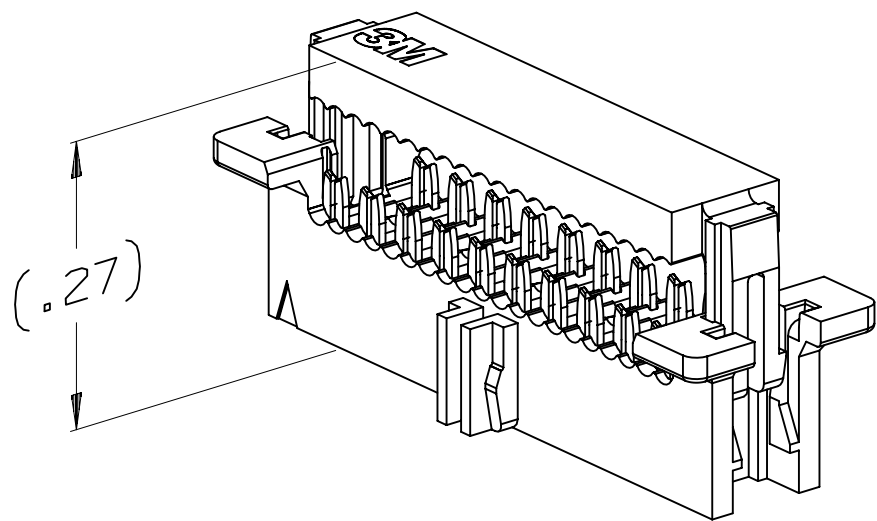
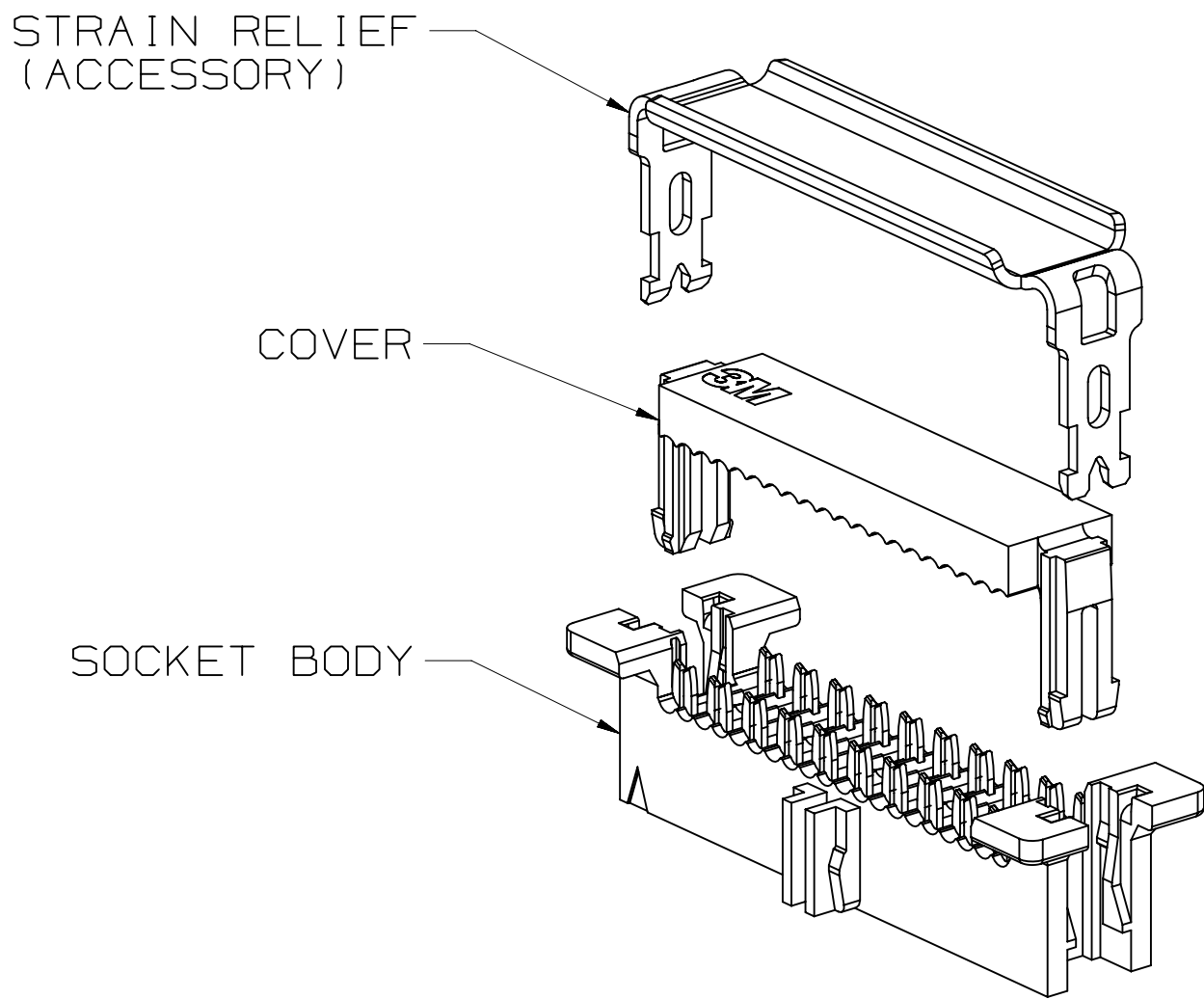
CENTER POLARIZATION  
AND FRICTION LATCH



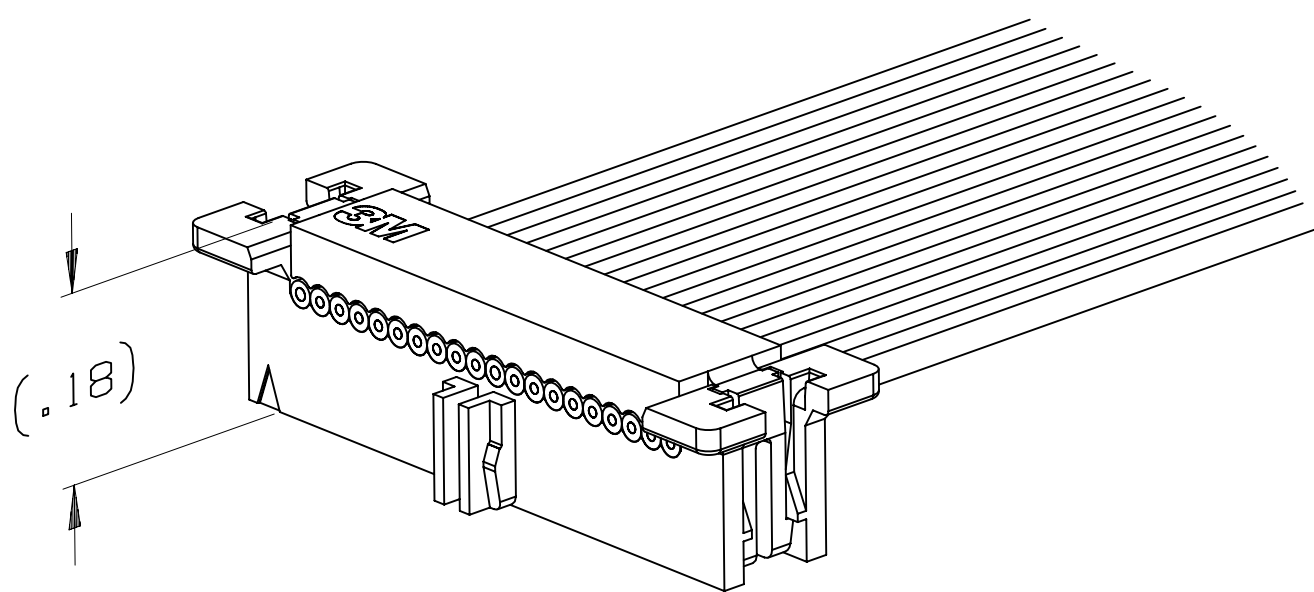
CENTER POLARIZATION  
AND NO FRICTION LATCH



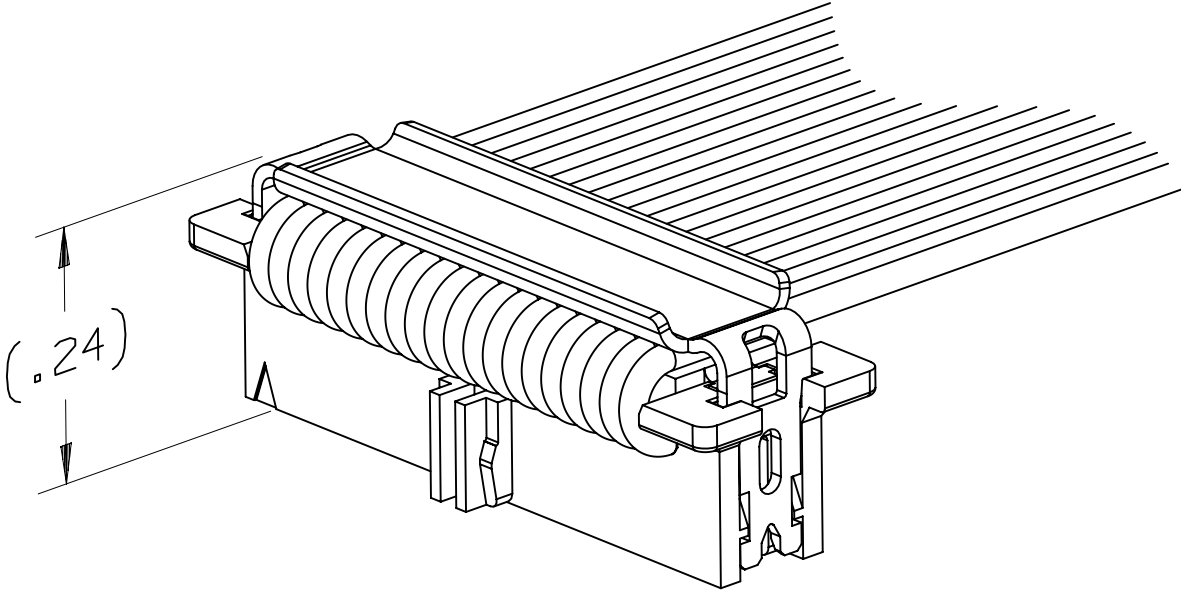
NO CENTER POLARIZATION  
AND NO FRICTION LATCH



PRE-POSITIONED COVER



NO STRAIN RELIEF



WITH OPTIONAL  
STRAIN RELIEF

TERMINATED  
CONNECTOR

3M™ ELECTRONIC SOLUTIONS DIVISION  
INTERCONNECT SOLUTIONS  
<http://www.3mconnectors.com>

3M IS A TRADEMARK OF 3M COMPANY.  
FOR TECHNICAL, SALES OR ORDERING  
INFORMATION CALL 800-225-5373

| Performance:           |                                                                                                                                                                                      |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current Rating:        | 1.0 A, all lines energized,<br>30C temp rise per EIA 364-70<br>1.5 A, 6 lines energized,<br>30C temp rise per EIA 364-70<br>2.5 A, 1 line energized, 30C<br>temp rise per EIA 364-70 |
| Voltage Rating:        | 125V                                                                                                                                                                                 |
| Insulation Resistance: | > 1 × 10 <sup>9</sup> Ohms at 500 VDC                                                                                                                                                |
| Withstanding Voltage:  | 1250VACrms at sea level                                                                                                                                                              |
| Operating Temperature: | -65°C to +105°C                                                                                                                                                                      |

ORDERING INFORMATION  
FOR RAPID INSTALLATION ON  
RIBBON CABLE APPLICATIONS

451 XX - 0 X 0 0 XX  
SERIES  
POSITION COUNT  
04 - 30  
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) (04-30 POS.)  
1 = CP NO FRICTION LATCH (08 - 30 POS.)  
2 = CP WITH FRICTION LATCH (08 - 30 POS.)

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

ACCESSORY: STRAIN RELIEF  
3448-451XX

POSITION COUNT  
04 - 30

APPLICATION TOOLING:  
ALUMINUM: 3443-82-XX

POSITION COUNT  
04 - 30

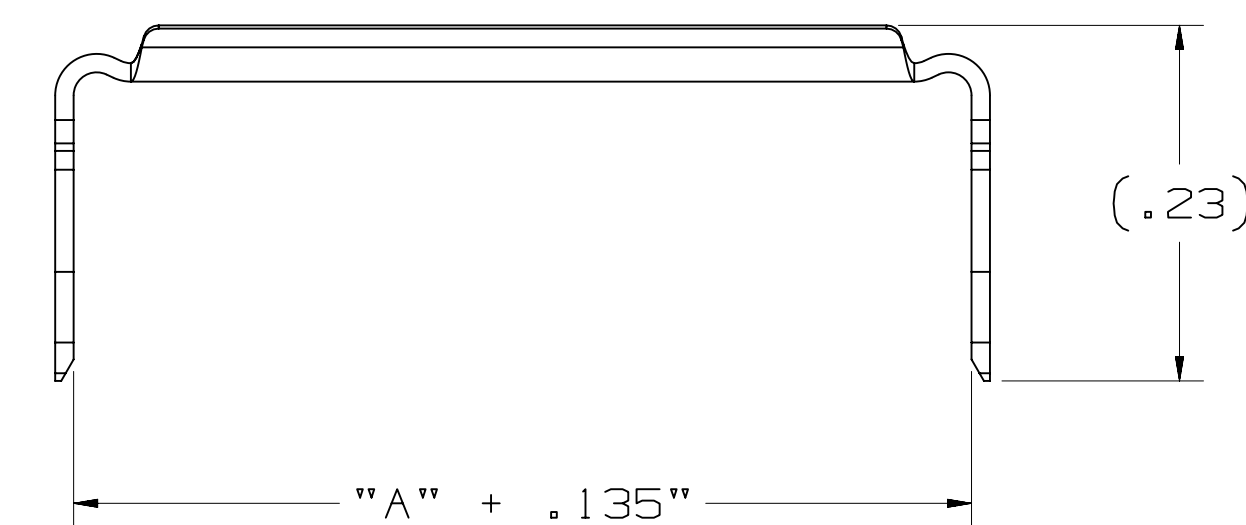
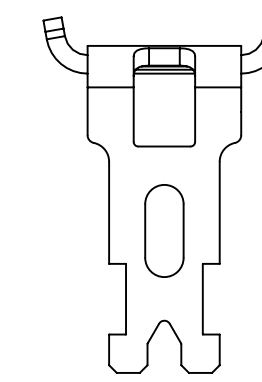
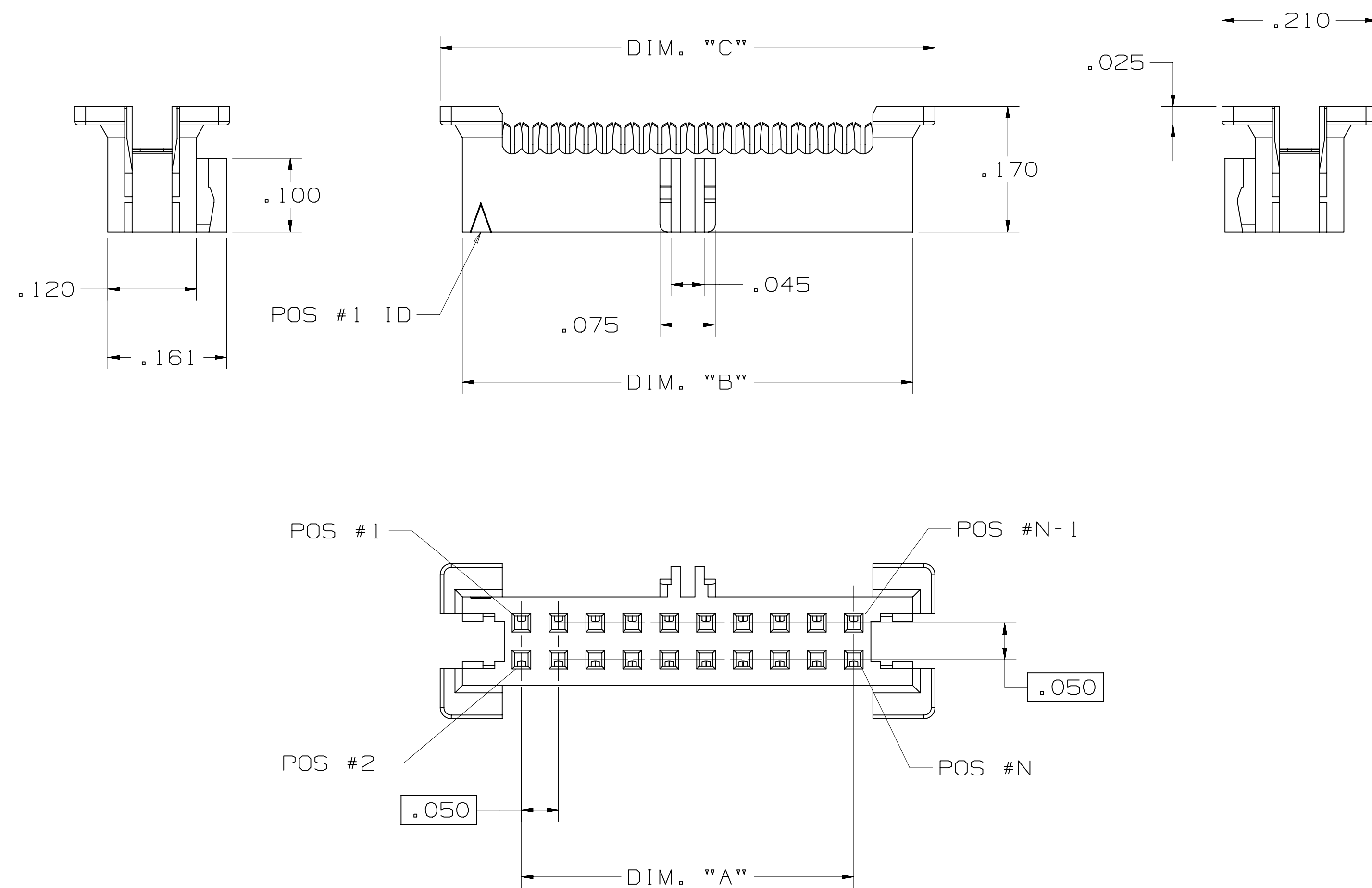
- NOTES
- MATERIAL:  
BODY: PBT, UL94V-0  
COVER: PBT, UL94V-0  
STRAIN RELIEF: STAINLESS  
STEEL  
CONTACTS: BeCu ALLOY.
  - PLATING:  
50-150μ" NICKEL UNDERPLATE  
30 = 30μ" MIN. GOLD ON WIPING  
AREA  
00 = FLASH GOLD ON WIPING AREA.
  - RIBBON CABLE COMPATIBILITY:  
GENERAL:  
0.025" PITCH PVC, 30 AWG,  
SOLID OR 7 STRAND.  
RECOMMENDED:  
3M 3447 AND 3754 SERIES  
CABLE.
  - MATING COMPATIBILITY:  
3M .050" X .050" SERIES 452  
HEADER WITH LATCH/EJECT  
OPTION.
  - REGULATORY INFORMATION:  
ROHS COMPLIANT. SEE THE  
REGULATORY INFORMATION  
APPENDIX (RIA) IN THE  
"ROHS COMPLIANCE" SECTION  
OF [WWW.3MCONNECTORS.COM](http://WWW.3MCONNECTORS.COM)  
FOR COMPLIANCE INFORMATION  
(RIA E1 & C1 APPLY)
  - 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

| DESIGN REFERENCE                |       | NEXT ASSEMBLY                             |       | REV                               | ECO   | ISSUE DATE AND DESCRIPTION                                                                                                                                                                                             |              | DRFT         | CHKD         |
|---------------------------------|-------|-------------------------------------------|-------|-----------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------|--------------|
| ARM                             | CODES | ARM                                       | CODES | ARM                               | CODES | DATE                                                                                                                                                                                                                   | DATE         | DATE         | DATE         |
| ARM                             | CODES | ARM                                       | CODES | ARM                               | CODES | FEB 11, 2011                                                                                                                                                                                                           | FEB 11, 2011 | FEB 11, 2011 | FEB 11, 2011 |
| DIVISION                        |       | DIVISION CODE                             |       | 3M                                |       | © 3M COPYRIGHT 2013                                                                                                                                                                                                    |              |              |              |
| Interconnect Solutions          |       | ISD                                       |       | 3M                                |       | This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved. |              |              |              |
| DO NOT SCALE DRAWING            |       | SCALE 6-1                                 |       | TOLERANCES EXCEPT AS NOTED        |       | TITLE                                                                                                                                                                                                                  |              |              |              |
| THIRD ANGLE PROJECTION          |       | INCHES .00 ± .02 .000 ± .010 .0000 ± .005 |       | MILLIMETERS 0 ± .00 ± .000 ± .000 |       | RIBBON CABLE SOCKET, .05 X .05 PITCH, 451 SERIES                                                                                                                                                                       |              |              |              |
| INTERPRET PER ASME Y14.5 - 1994 |       | MAX SURFACE ROUGHNESS                     |       | MARKED ONLY                       |       | CAGE NUMBER D78-5100-2436-3                                                                                                                                                                                            |              |              |              |
| MODEL                           |       | LISTS                                     |       | YES NO                            |       | SHT 1 OF 2                                                                                                                                                                                                             |              |              |              |

3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY,  
.05" X .05" (1.27mm X 1.27mm) PITCH, 451 SERIES

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    |
| 30            | .700    | .860    | .920    |



ACCESSORY - STRAIN RELIEF  
PART NUMBER 3448-451XX

|              |       |                                                          |               |                     |
|--------------|-------|----------------------------------------------------------|---------------|---------------------|
| C            | 50290 | OCT 08,2013<br>REVISE NOTES 1, 3, 8<br>& OPERATING TEMP. | JNC           | SN                  |
| B            | 48635 | JUL 12,2013<br>MATCH TEXT FONTS &<br>ADD NOTE 10         | JNC           | SN                  |
| A            | 46797 | MAR 25,2013<br>PRODUCTION RELEASE                        | JNC           | SAN                 |
| REV          | ECO   | ISSUE DATE AND DESCRIPTION                               | DRFT          | CHKD                |
| DRFT<br>AFRM | CHD   | DATE<br>FEB 11,2011                                      | MG            | DATE                |
| CHD          |       | DATE                                                     | APPROV<br>SAN | DATE<br>FEB 11,2011 |

| DESIGN                                                                                              | REFERENCE | NEXT                                                                                     | ASSEMBLY | REV                                                  | ECO | ISSUE DATE AND DESCRIPTION                                                                                                                                                                                                                                                                                          | DRFT          | CHKD                 |
|-----------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------|----------|------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|
| ACROSS<br>CODES                                                                                     |           |                                                                                          |          | DRFT<br>ARM                                          |     | DATE<br>FEB 11, 2011                                                                                                                                                                                                                                                                                                | MFG<br>DATE   |                      |
|                                                                                                     |           |                                                                                          |          | CHKD                                                 |     | DATE                                                                                                                                                                                                                                                                                                                | APPRV.<br>SAN | DATE<br>FEB 11, 2011 |
| DIVISION<br><b>Interconnect Solutions</b>                                                           |           |                                                                                          |          | DIVISION CODE<br><b>ISD</b>                          |     | © 3M COPYRIGHT 2013                                                                                                                                                                                                                                                                                                 |               |                      |
| DO NOT<br>SCALE<br>DRAWING                                                                          |           | SCALE<br>1                                                                               |          | TOLERANCES<br>EXCEPT AS<br>NOTED                     |     |  <p>This document and the information it contains are 3M property and may not be reproduced or further distributed without 3M permission, or used or disclosed other than for 3M authorized purposes. All rights reserved.</p> |               |                      |
|                |           | INCHES<br>.0<br>.00 ±.1<br>.000 ±.02<br>.0000 ±.010<br>.0000 ±.005                       |          | TITLE                                                |     | RIBBON CABLE SOCKET,<br>.05 X .05 PITCH, 451<br>SERIES                                                                                                                                                                                                                                                              |               |                      |
| THIRD ANGLE PROJECTION                                                                              |           | MILLIMETERS<br>0<br>.0<br>.00 ±.1<br>.000 ±.010<br>.000 ±.005                            |          | CAGE<br>NUMBER                                       |     | SIZE<br>DRAWING NO.                                                                                                                                                                                                                                                                                                 |               | REV.                 |
| INTERPRET PER<br>ASME Y14.5 - 1994                                                                  |           | <input checked="" type="checkbox"/> ALL SURFACES<br><input type="checkbox"/> MARKED ONLY |          | <input checked="" type="checkbox"/> D 78-5100-2436-3 |     | <input type="checkbox"/> DET.<br><input checked="" type="checkbox"/> TESTS <input checked="" type="checkbox"/> PYES <input checked="" type="checkbox"/> NO                                                                                                                                                          |               | SHT 2 OF 2           |
| <input checked="" type="checkbox"/> MAX. SURFACE ROUGHNESS<br><input type="checkbox"/> ALL SURFACES |           | <input checked="" type="checkbox"/> ANGLES                                               |          | MODEL                                                |     |                                                                                                                                                                                                                                                                                                                     |               |                      |