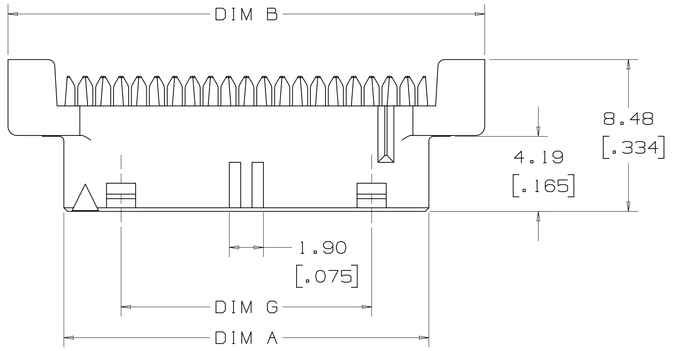
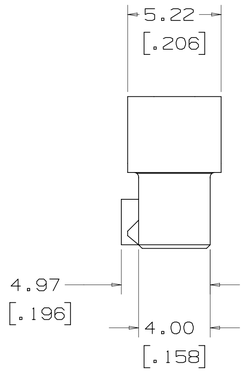
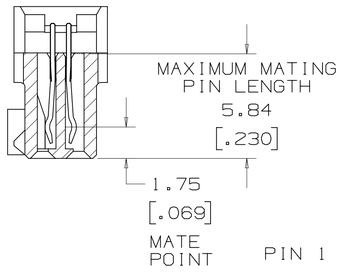
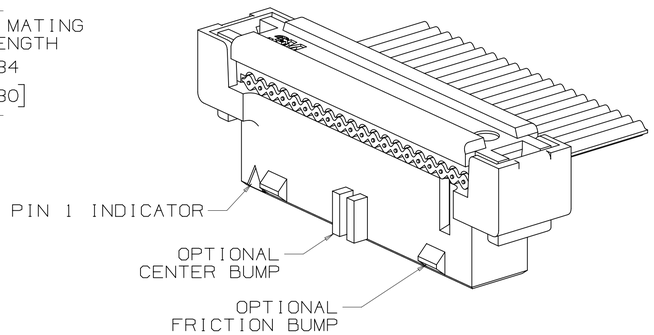
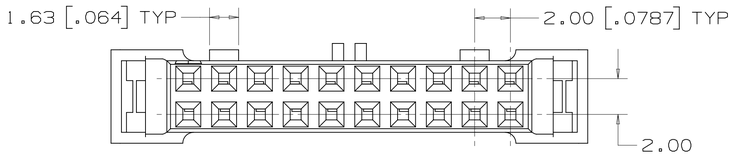
# 3M™ Ribbon Cable Socket 2 mm X 2 mm Pitch 158 Series

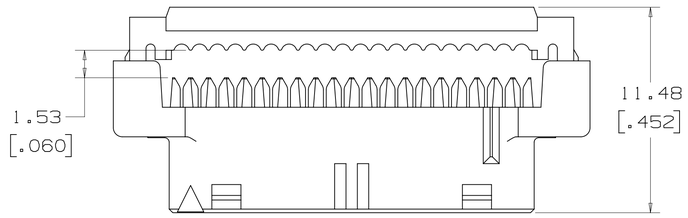


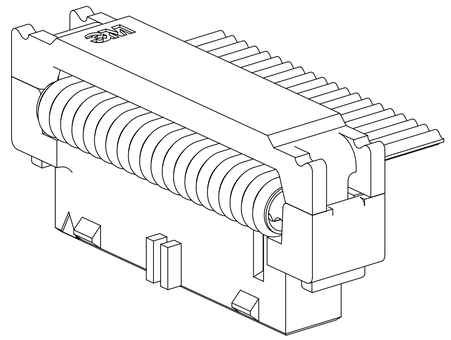



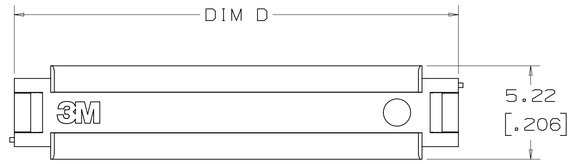



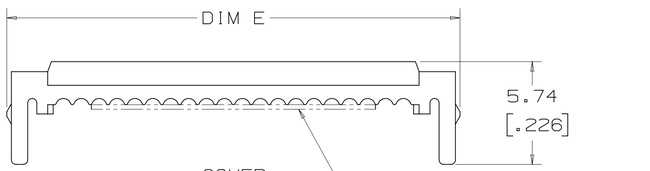



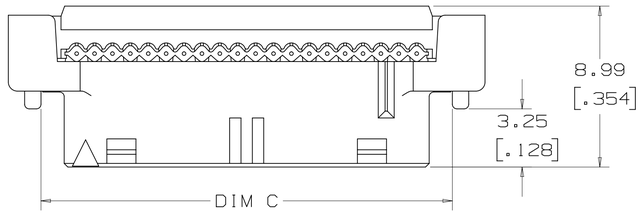




PREASSEMBLED HEIGHT WITH COVER



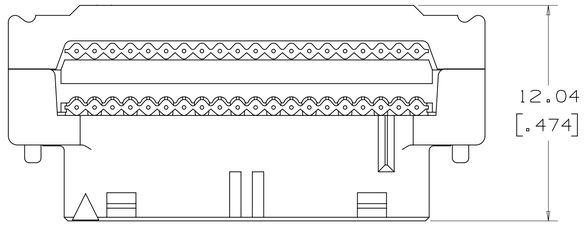




ASSEMBLED HEIGHT WITH COVER



STRAIN RELIEF




ASSEMBLED HEIGHT WITH COVER
AND STRAIN RELIEF

## NOTES

1. MATERIAL:
BODY: HIGH TEMP GLASS FILLED POLYESTER, GRAY UL94V-0
CONTACTS: COPPER ALLOY

2. PLATING:
2.03-3.81 µm [80-150 µin] NICKEL UNDERPLATE
0.38 µm [15 µin] OR
0.76 µm [30 µin] AVG GOLD ON WIPING AREA.

3. RIBBON CABLE:
RECOMMENDED: 3M™ 3625 (28 AWG, 7 STRAND).

4. APPLICATION TOOLS:
3460 PRESS (OR EQUIVALENT)
3443-119 LOCATOR PLATE,
3442-9 PLATEN
SEE 3M INSTRUCTION SHEET 78-9101-2810-3.

5. MATES WITH 3M™ HEADERS 159 SERIES (REFERENCE 3M DRAWING 78-5100-2359-7). (0.51 mm [.020 in] SQ, CROWNED PINS).

6. SEE THE REGULATORY INFORMATION APPENDIX (RIA) IN THE "RoHS COMPLIANCE" SECTION OF WWW.3MCONNECTOR.COM FOR COMPLIANCE INFORMATION (RIA E1 & C1 APPLY).

7. FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SEE 3M 78-5102-0078-1.

8. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.

| PERFORMANCE 7 8 | |
|---|---|
| CURRENT: | 1.25 A, ALL LINES ENERGIZED<br>2.75 A, 6 LINES ENERGIZED<br>4.75 A, 1 LINE ENERGIZED |
| INSULATION RESISTANCE: | >1X10⁹ OHMS AT 500 VDC |
| WITHSTANDING VOLTAGE: | 500 VACrms AT SEA LEVEL |
| TEMPERATURE RATING: | -55°C TO +105°C |

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|---|---|---|---|---|
| E | 41488 | JUN 21,2012<br>REVISED CURRENT RATING IN PERFORMANCE TABLE | LDS | SAN |
| D | 37252 | NOV 04,2011<br>REVISED ORDERING INFORMATION<br>REV C HISTORY REMOVED | LDS | SF |
| A | 30741 | OCT 28,2010<br>INITIAL RELEASE | LDS | SF |

DESIGN REFERENCE | NEXT ASSEMBLY
DISTRIBUTION CODES | DIVISION | DIVISION CODE

DRFT L. SCHMIDT — DATE JUL 23,2010 — MFG — DATE
CHKD — DATE — APPVL S. FELDMAN — DATE JUL 30,2010



3M Center, St. Paul, MN 55144

DO NOT SCALE DRAWING | SCALE 6/1
TOLERANCES EXCEPT AS NOTED
INCHES: .0 ±, .00 ±, .000 ±, .0000 ±
THIRD ANGLE PROJECTION
INTERPRET PER ASME Y14.5 - 1994
MILLIMETERS: 0 ±, .0 ±, .00 ± .13, .000 ±
MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY
ANGLES ±1°

METRIC [ENGLISH]

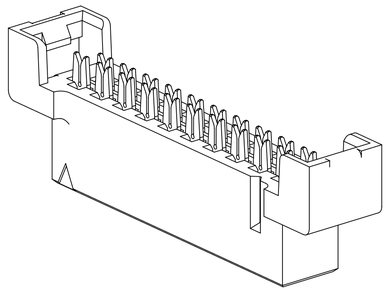
TITLE: 3M RIBBON CABLE SOCKET 2 MM x 2 MM PITCH 158 SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2358-9 | REV. E
MODEL | DET. LISTS ☐ YES ☒ NO | SHT 1 OF 3

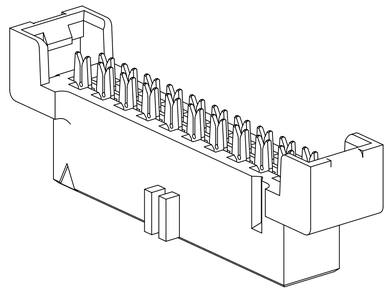
78-5100-2358-9 (DRAWING NUMBER) E (REVISION)

# 3M™ Ribbon Cable Socket 2 mm X 2 mm Pitch 158 Series

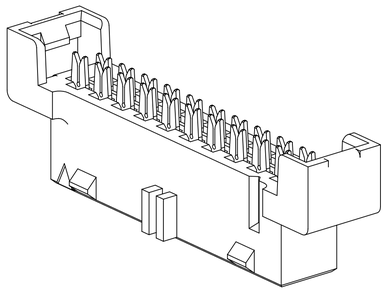
| NUMBER OF POSITIONS | DIM A | DIM B | DIM C | DIM D | DIM E | DIM F | DIM G |
|---|---|---|---|---|---|---|---|
| 6 | 6.39 [.252] | 12.64 [.497] | 8.98 [.354] | 10.81 [.426] | 11.32 [.446] | 12.64 [.497] | N/A |
| 8 | 8.39 [.330] | 14.64 [.576] | 10.98 [.432] | 12.81 [.504] | 13.32 [.524] | 14.64 [.576] | N/A |
| 10 | 10.39 [.409] | 16.64 [.655] | 12.98 [.511] | 14.81 [.583] | 15.32 [.603] | 16.64 [.655] | N/A |
| 12 | 12.39 [.488] | 18.64 [.734] | 14-98 [.590] | 16.81 [.662] | 17.32 [.682] | 18.64 [.734] | N/A |
| 14 | 14.39 [.567] | 20.64 [.812] | 16.98 [.669] | 18.81 [.741] | 19.32 [.761] | 20.64 [.812] | 8.00 [.315] |
| 16 | 16.39 [.645] | 22.64 [.891] | 18.98 [.747] | 20.81 [.819] | 21.32 [.839] | 22.64 [.891] | 10.00 [.394] |
| 20 | 20.39 [.803] | 26.64 [1.049] | 22.98 [.905] | 24.81 [.977] | 25.32 [.997] | 26.64 [1.049] | 14.00 [.551] |
| 22 | 22.39 [.882] | 28.64 [1.127] | 24.98 [.984] | 26.81 [1.056] | 27.32 [1.076] | 28.64 [1.127] | 16.00 [.630] |
| 24 | 24.39 [.960] | 30.64 [1.206] | 26.98 [1.062] | 28.81 [1.134] | 29.32 [1.154] | 30.64 [1.206] | 18.00 [.709] |
| 26 | 26.39 [1.039] | 32.64 [1.285] | 28.98 [1.141] | 30.81 [1.213] | 31.32 [1.233] | 32.64 [1.285] | 20.00 [.787] |
| 30 | 30.39 [1.197] | 36.64 [1.442] | 32.98 [1.299] | 34.81 [1.371] | 35.32 [1.391] | 36.64 [1.442] | 24.00 [.945] |
| 34 | 34.39 [1.354] | 40.64 [1.600] | 36.98 [1.456] | 38.81 [1.528] | 39.32 [1.548] | 40.64 [1.600] | 28.00 [1.102] |
| 40 | 40.39 [1.590] | 46.64 [1.836] | 42.98 [1.692] | 44.81 [1.764] | 45.32 [1.784] | 46.64 [1.836] | 34.00 [1.339] |
| 44 | 44.39 [1.748] | 50.64 [1.994] | 46.98 [1.850] | 48.81 [1.922] | 49.32 [1.942] | 50.64 [1.994] | 38.00 [1.496] |
| 50 | 50.39 [1.984] | 56.64 [2.230] | 52.98 [2.086] | 54.81 [2.158] | 55.32 [2.178] | 56.64 [2.230] | 44.00 [1.732] |



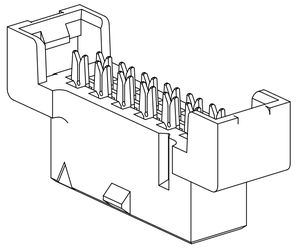
SOCKET WITHOUT OPTIONS
ALL POSITIONS



CENTER BUMP OPTION
ALL POSITIONS



CENTER BUMP WITH
FRICTION BUMP OPTION
14-50 POSITIONS



CENTER FRICTION BUMP OPTION
6-12 POSITIONS ONLY

## ORDERING INFORMATION

### TIER 1 - BEST

1581XX-1X00

- TIER: 1 = BEST
- POSITION COUNT (SEE TABLE)
- PART CONFIGURATION: 1 = ADHESIVE COVER
- POLARIZATION/LATCHING:
  - 1 = WITH CENTER BUMP, NO FRICTION BUMPS (6-50 POS)
- PACKAGING: 0 = TRAY
- PLATING: BLANK = 0.76 µm [30 µin] GOLD

### TIER 2 - BETTER

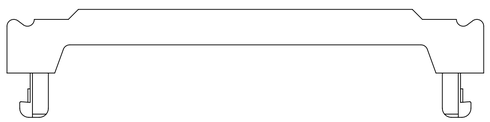
1582XX-0X20XX

- TIER: 2 = BETTER
- POSITION COUNT (SEE TABLE)
- PART CONFIGURATION: 0 = PREASSEMBLED COVER
- POLARIZATION/LATCHING:
  - 0 = NO CENTER BUMP, NO FRICTION BUMPS (6-50 POS)
  - 1 = WITH CENTER BUMP, NO FRICTION BUMPS, (6-50 POS)
  - 2 = WITH CENTER BUMP AND DUAL FRICTION BUMPS (14-50 POS ONLY)
  - 3 = WITH CENTRAL FRICTION BUMP, NO CENTER BUMP (6-12 POS ONLY)
- PACKAGING: 2 = SWORDS
- PLATING:
  - BLANK = 0.76 µm [30 µin] GOLD
  - 15 = 0.38 µm [15 µin] GOLD

### TIER 3 - VALUE

1583XX-211015

- TIER: 3 = VALUE
- POSITION COUNT (SEE TABLE)
- PART CONFIGURATION: 2 = SEPARATE COVER
- POLARIZATION/LATCHING:
  - 1 = WITH CENTER BUMP, NO FRICTION BUMPS (6-50 POS)
- PACKAGING: 1 = BULK PACK
- PLATING: 15 = 0.38 µm [15 µin] GOLD



STRAIN RELIEF
3448-158XX
└ POSITION COUNT (SEE TABLE)

METRIC [ENGLISH]

| REV | ECO | ISSUE DATE AND DESCRIPTION | DRFT | CHKD |
|---|---|---|---|---|
| E | 41488 | JUN 21,2012<br>REVISED CURRENT RATING IN PERFORMANCE TABLE | LDS | SAN |
| D | 37252 | NOV 04,2011<br>REVISED ORDERING INFORMATION<br>REV C HISTORY REMOVED | LDS | SF |
| A | 30741 | OCT 28,2010<br>INITIAL RELEASE | LDS | SF |

DESIGN REFERENCE | NEXT ASSEMBLY | DISTRIBUTION CODES | DIVISION | DIVISION CODE

DRFT: L. SCHMIDT — DATE: JUL 23,2010 — MFG — DATE
CHKD — DATE — APPVL: S. FELDMAN — DATE: JUL 30,2010

DO NOT SCALE DRAWING | SCALE 6/1 | TOLERANCES EXCEPT AS NOTED | THIRD ANGLE PROJECTION | INTERPRET PER ASME Y14.5 - 1994 | MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY

INCHES: .0 ±, .00 ±, .000 ±, .0000 ±
MILLIMETERS: 0 ±, .0 ±, .00 ±.13, .000 ±
ANGLES ±1°

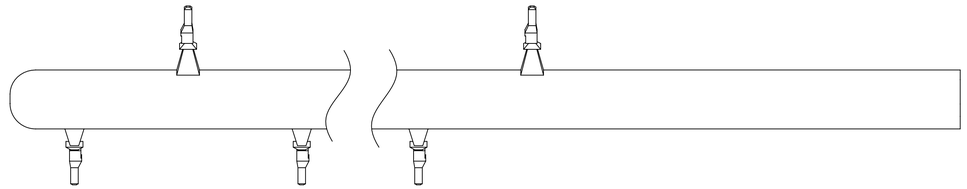


TITLE: 3M RIBBON CABLE SOCKET 2 MM x 2 MM PITCH 158 SERIES

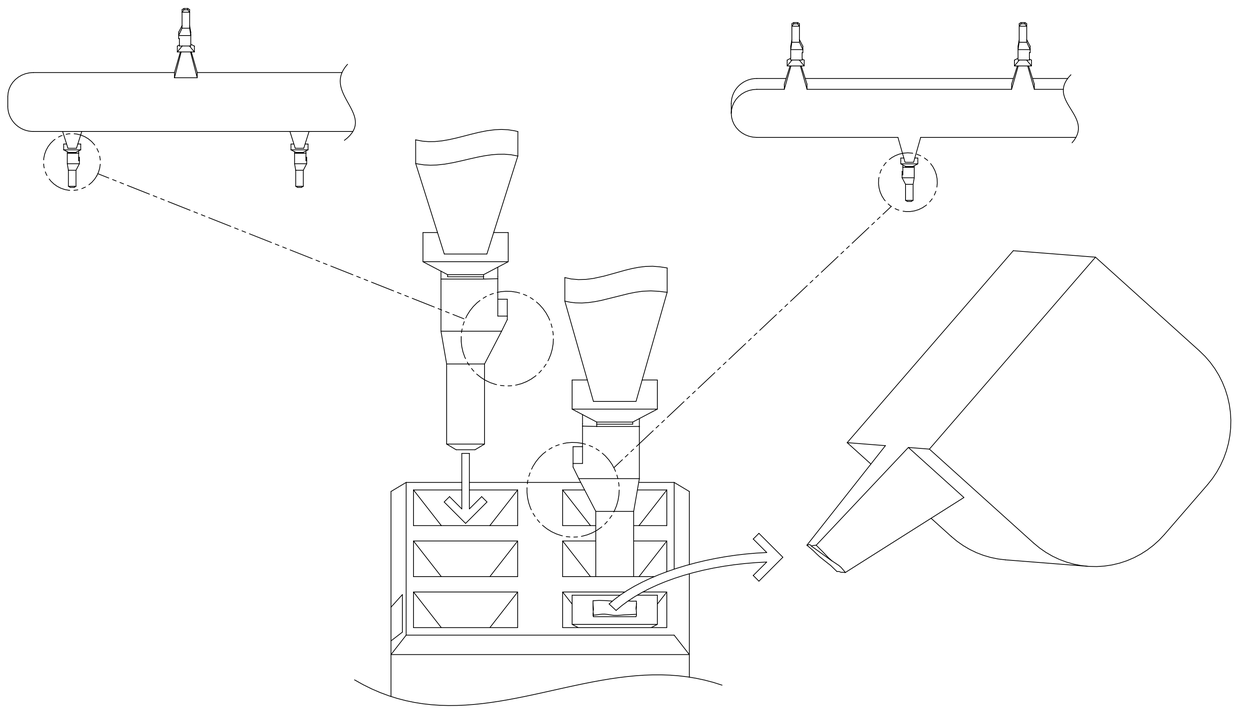
CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2358-9 | REV. E
MODEL | DET LISTS ☐ YES ☒ NO | SHT 2 OF 3

78-5100-2358-9 | E

3M™ Ribbon Cable Socket 2 mm X 2 mm Pitch 158 Series



POLARIZING KEY
3435-152200



POLARIZING KEY ORIENTATION AND INSTALLATION

RIBBON CABLE SOCKET ACCESSORIES

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|---|---|---|---|---|
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DO NOT SCALE DRAWING | SCALE 1/1

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 1994

MAX SURFACE ROUGHNESS 125 ☐ ALL SURFACES ☒ MARKED ONLY

METRIC [ENGLISH]

TOLERANCES EXCEPT AS NOTED

INCHES
.0 ±
.00 ±
.000 ±
.0000 ±

MILLIMETERS
0 ±
.0 ±
.00 ± .13
.000 ±

ANGLES ±1°



TITLE
3M RIBBON CABLE SOCKET 2 MM x 2 MM PITCH 158 SERIES

CAGE NUMBER | SIZE D | DRAWING NO. 78-5100-2358-9 | REV. E

MODEL | DET. LISTS ☐ YES ☒ NO | SHT 3 OF 3

78-5100-2358-9 DRAWING NUMBER | E REVISION