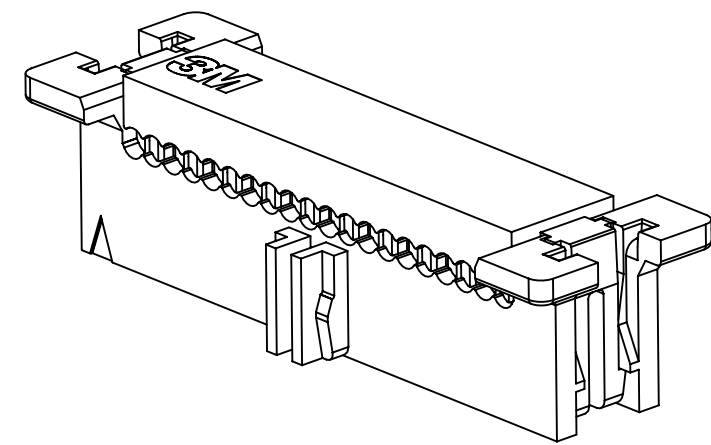
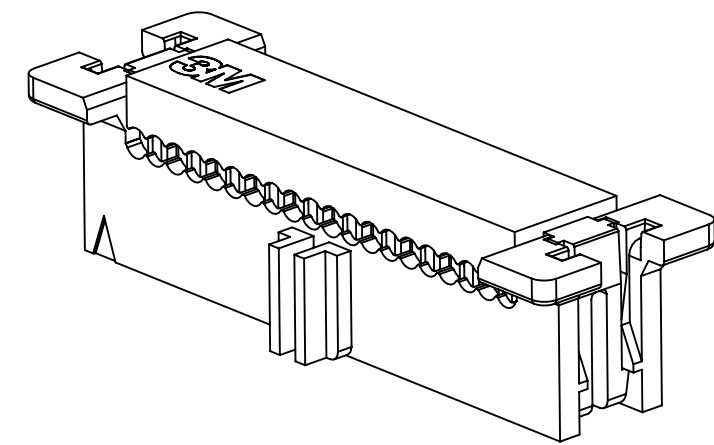


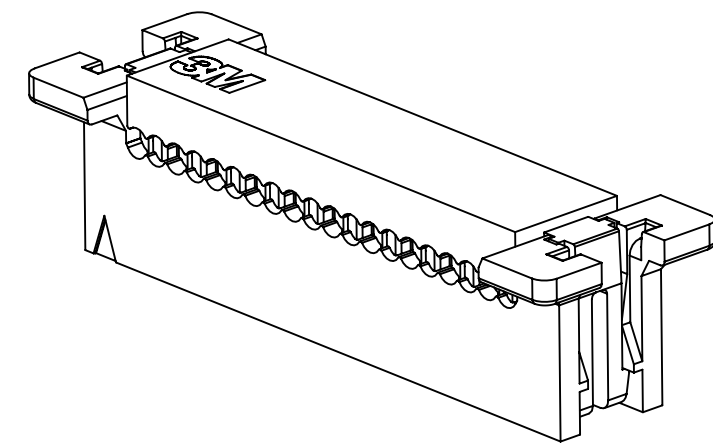
3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY, 451 SERIES  
 .050" X .050" (1.27MM X 1.27MM) FOR .025" PITCH CABLE



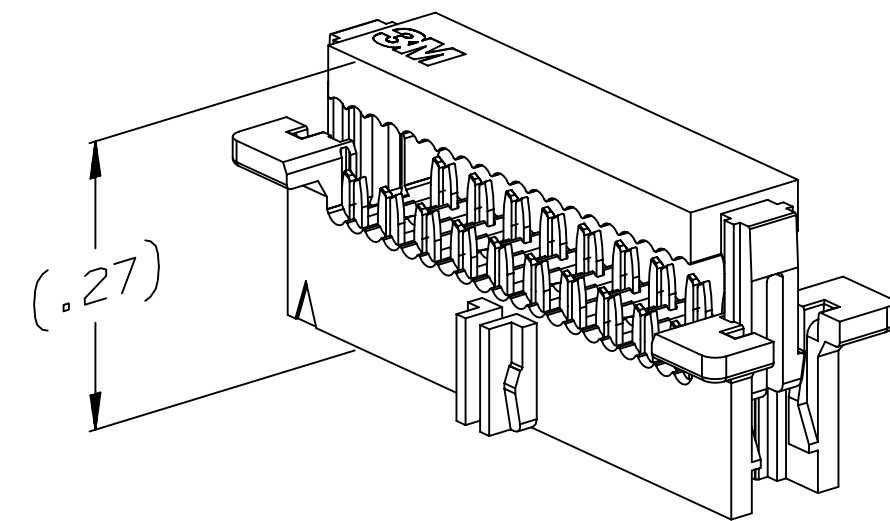
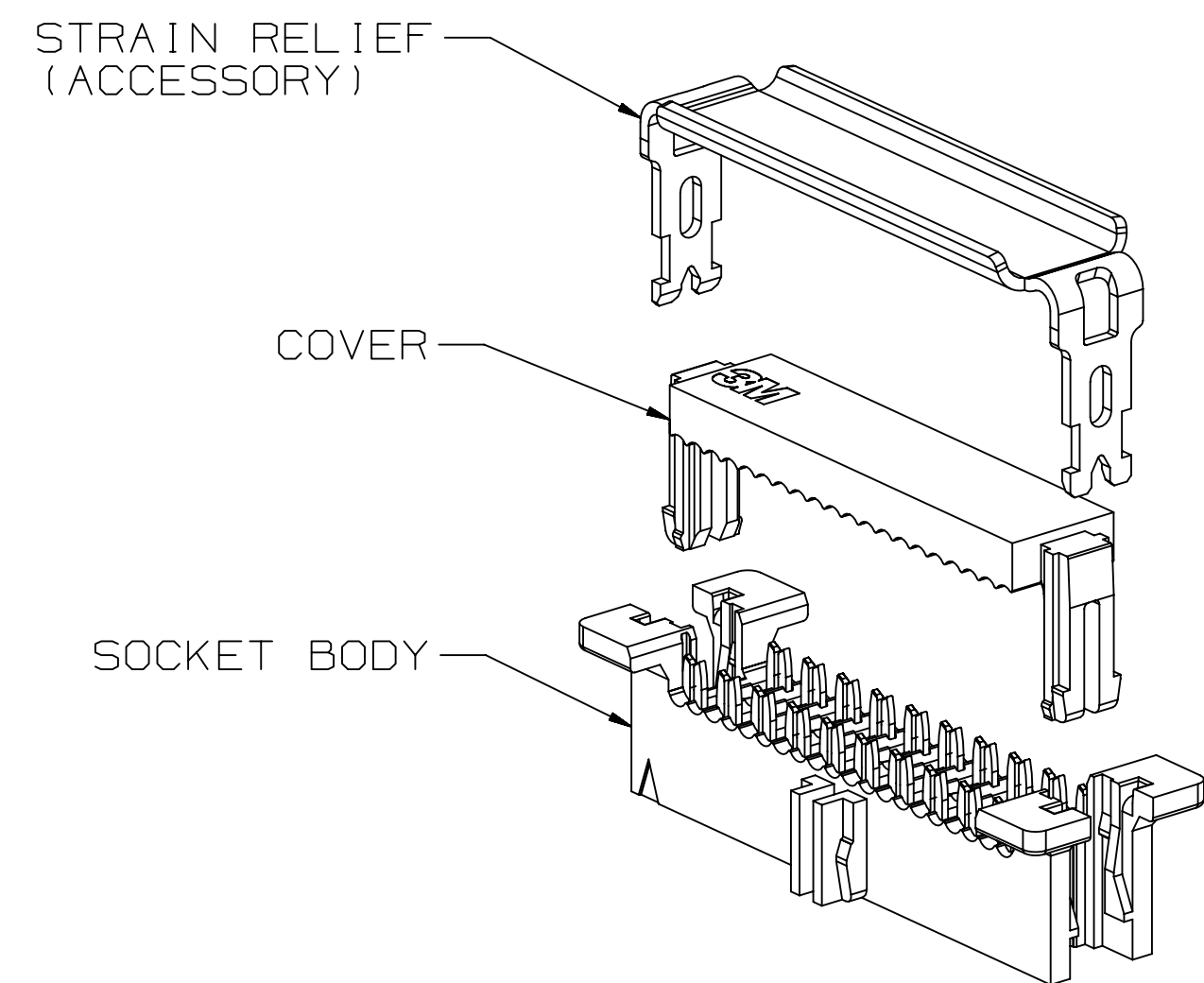
CENTER POLARIZATION AND FRICTION LATCH



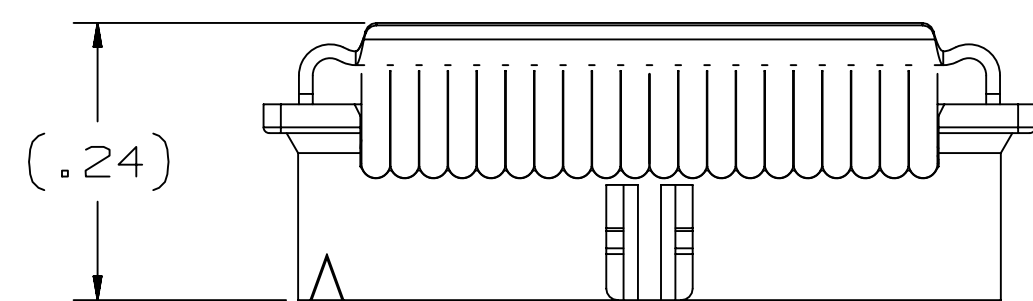
CENTER POLARIZATION AND NO FRICTION LATCH



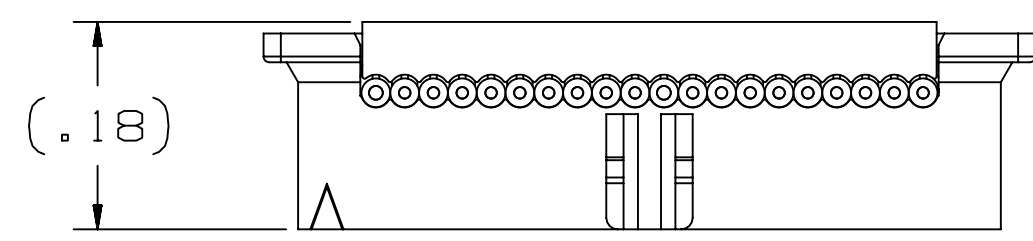
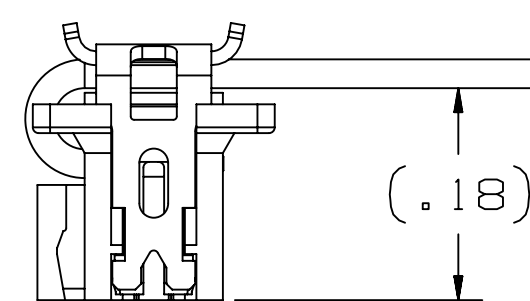
NO CENTER POLARIZATION AND NO FRICTION LATCH



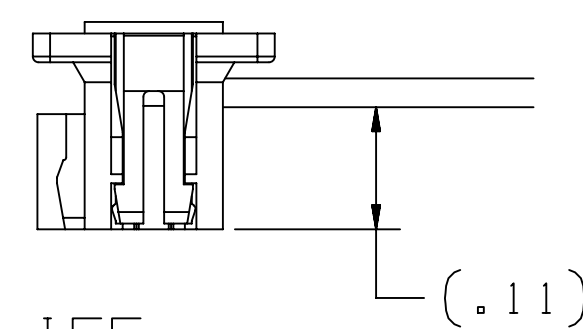
PRE-POSITIONED COVER



WITH OPTIONAL STRAIN RELIEF



NO STRAIN RELIEF



TERMINATED CONNECTOR

PERFORMANCE:	
CURRENT RATING:	1.0A, UL 04P-50P, NOT FOR CURRENT INTERRUPTION 1.0A, CUL 04P-30P, NOT FOR CURRENT INTERRUPTION 0.75A, CUL 32P-50P, NOT FOR CURRENT INTERRUPTION 0.75A, ALL LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70 1.50A, 6 LINES ENERGIZED, 30°C TEMP RISE PER EIA 364-70
UL & CUL VOLTAGE RATING:	125V <sub>AC</sub>
INSULATION RESISTANCE:	> 1 x 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, 30 AWG, SOLID OR STRANDED.  
RECOMMENDED CABLE:  
SEE TABLE 2 FOR CABLE COMPATIBILITY.
  - 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
  - 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

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION  
 INTERCONNECT SOLUTIONS  
<http://www.3M.com/interconnect>

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

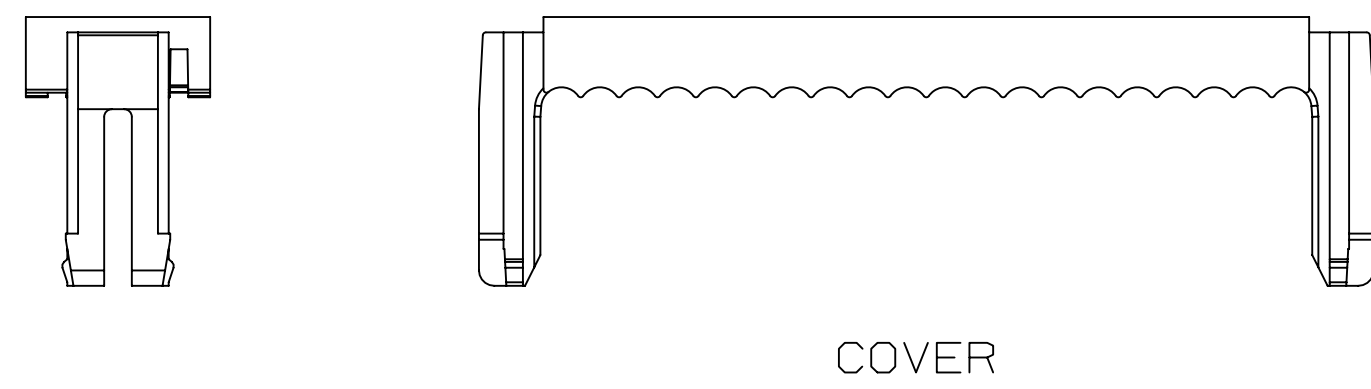
**3M** **us**  
 UL FILE NO: E68080

78-5100-2396-9 78-5100-2437-1	DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
			DRFT	ARM	FEB 11, 2011	MFG	DATE
			CHKD			APPR	DATE
						SAN	FEB 11, 2011
DIVISION		DIVISION CODE		EMSD			
DO NOT SCALE DRAWING	SCALE 6/1	TOLERANCES EXCEPT AS NOTED		© 3M COPYRIGHT 2022 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.			
THIRD ANGLE PROJECTION		INCHES		.0 ± .1 .00 ± .02 .000 ± .010 .0000 ± .005			
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS		0 ± .0 ± .00 ± .000 ±			
MAX SURFACE ROUGHNESS		ALL SURFACES		.000 ± .000 ±			
MARKED ONLY		ANGLES		±			
TITLE		CAGE NUMBER		DRAWING NO.		REV.	
RIBBON CABLE WMT SOCKET, .05 X .05 PITCH, 451 SERIES		D		78-5100-2436-3		K	
MODEL		451		DET		SHT 1 OF 3	

78-5100-2436-3 K REVISION DRAWING NUMBER

3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY, 451 SERIES  
 .050" X .050" (1.27MM X 1.27MM) FOR .025" PITCH CABLE

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



COVER

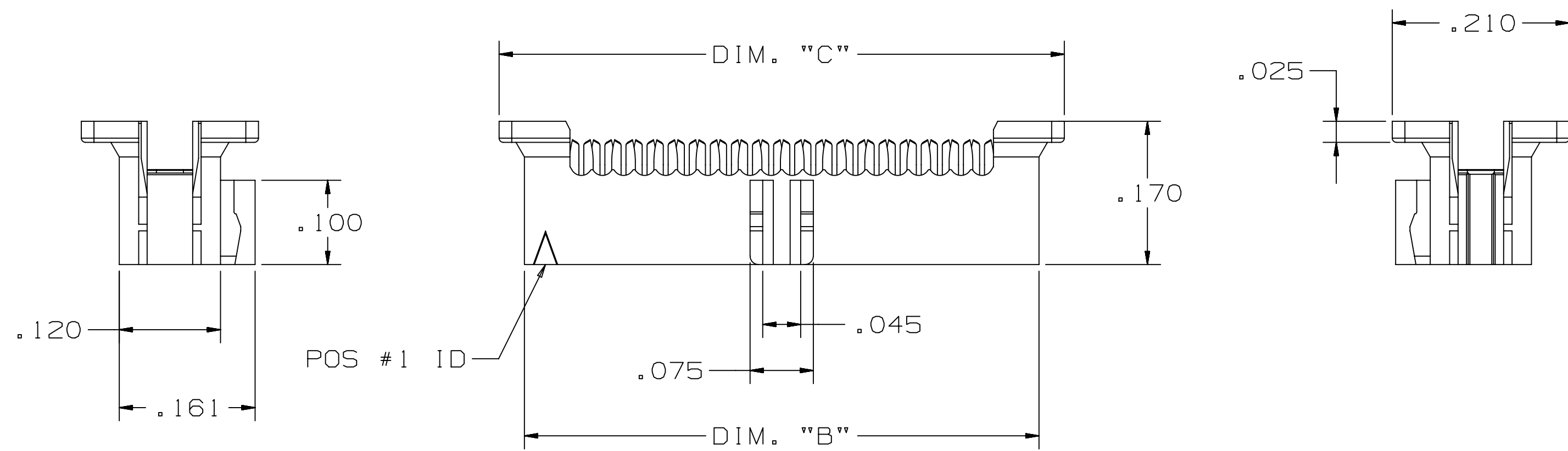
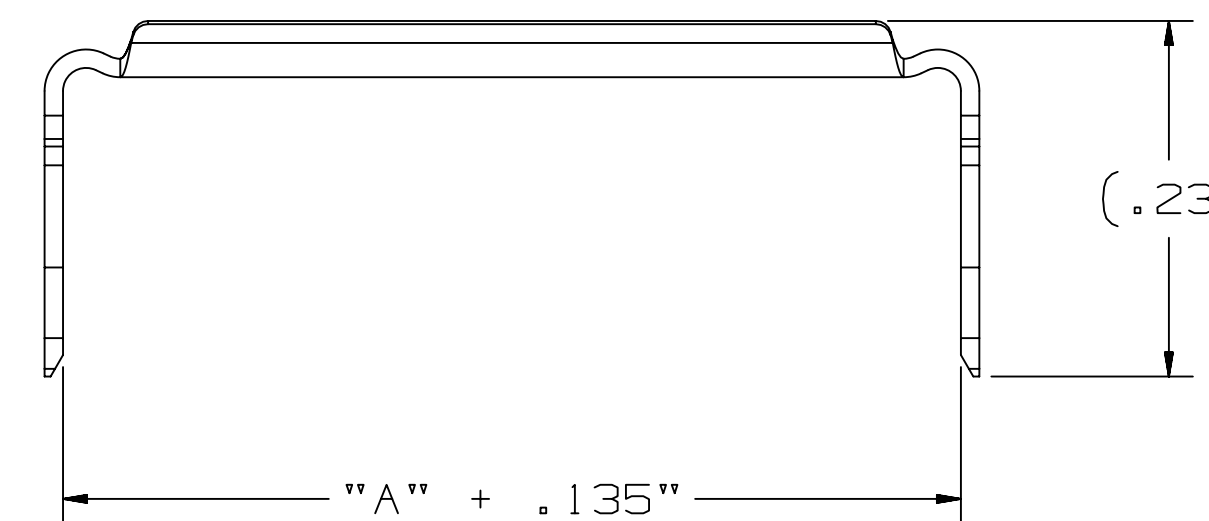
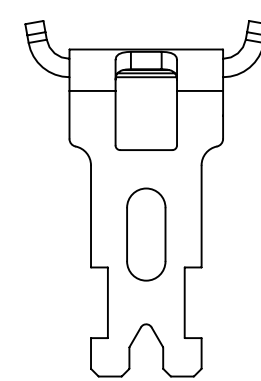
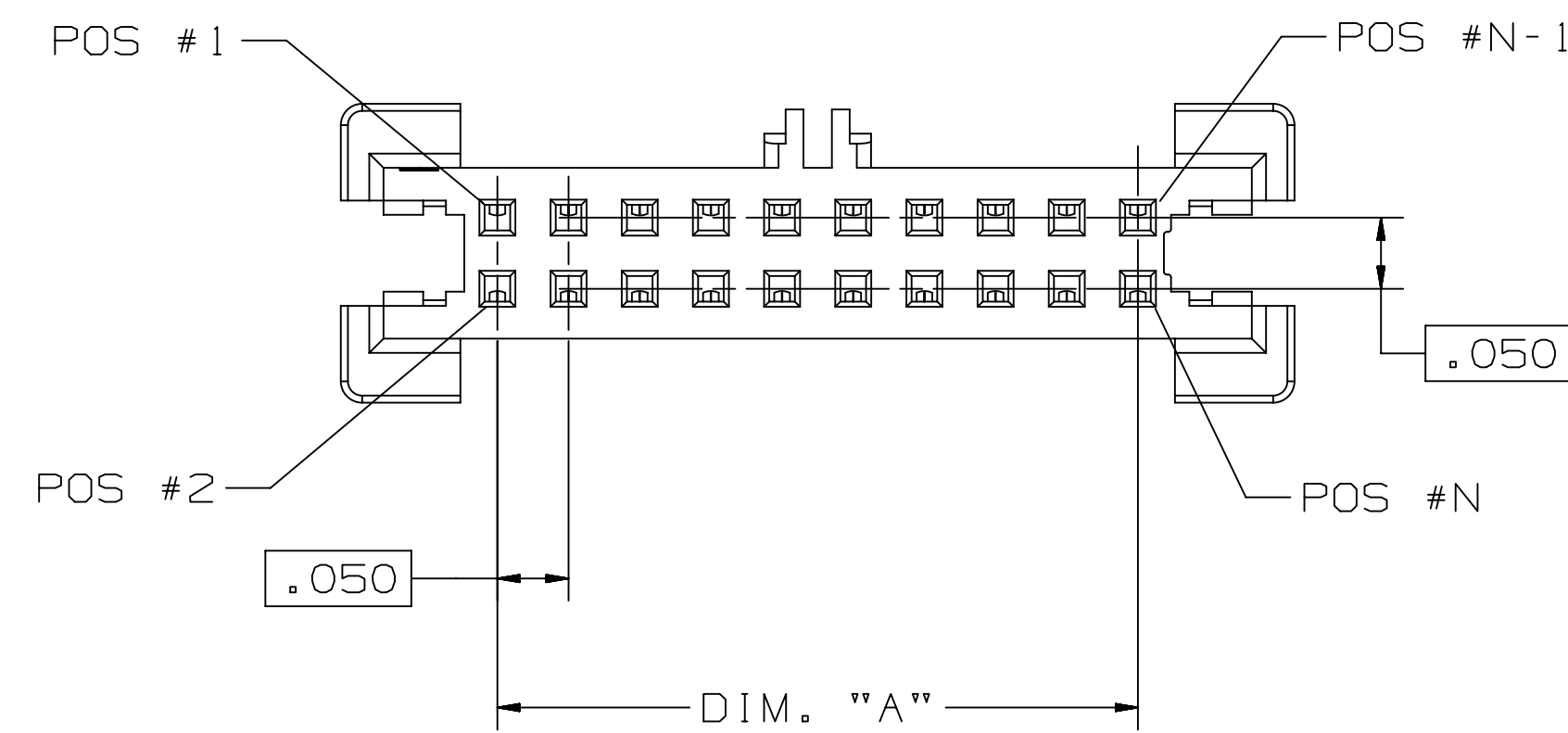


TABLE 2	
LINE	COMPATIBLE RIBBON CABLE
1	3M™ ROUND CONDUCTOR FLAT CABLE, 3754 SERIES: PVC, ROUND STRANDED CONDUCTOR
2	3M™ ROUND CONDUCTOR FLAT CABLE, 3447 SERIES: PVC, ROUND SOLID CONDUCTOR
3	3M™ ROUND CONDUCTOR FLAT CABLE, 3756 SERIES: TPE, ROUND STRANDED CONDUCTOR
4	3M™ ROUND CONDUCTOR FLAT CABLE, 3749 SERIES: TPE, ROUND SOLID CONDUCTOR
5	3M™ ROUND CONDUCTOR FLAT CABLE, 3609 SERIES: FEP, ROUND STRANDED CONDUCTOR
6	3M™ ROUND CONDUCTOR FLAT CABLE, 3604 SERIES: FEP, ROUND SOLID CONDUCTOR
7	3M™ ROUND CONDUCTOR FLAT CABLE, HF447 SERIES: PO, HALOGEN FREE, ROUND SOLID CONDUCTOR
8	3M™ ROUND CONDUCTOR FLAT CONTROLLED IMPEDANCE CABLE, 7700 SERIES: PO, SHIELDED, ROUND SOLID CONDUCTOR



ACCESSORY - STRAIN RELIEF  
 PART NUMBER 3448-451XX

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
K	106347	AUG 19, 2022 ADD TABLE 2 FOR CABLE	JNC	SAN
J	105041	MAY 26, 2022 REVISE PERFORMANCE SECTION	JNC	SAN
H	100200	OCT 19, 2021 ADD POS 26, 40, 50	JNC	SAN
G	92270	AUG 19, 2020 ADD NOTES AND VIEWS	JNC	SAN
F	56988	SEP 24, 2014 REVISE PERFORMANCE CHART	JNC	SN
E	54514	MAY 07, 2014 ADD UL LOGO	SJS	SAN
D	51884	JAN 08, 2014 ADD DESIGN REF, UPDATE TITLE, ADD TS REF	SJS	SAN
C	50290	OCT 08, 2013 REVISE NOTES 1, 3, 8 & OPERATING TEMP.	JNC	SN
B	48635	JUL 12, 2013 MATCH TEXT FONTS & ADD NOTE 10	JNC	SN
A	46797	MAR 25, 2013 PRODUCTION RELEASE	JNC	SAN

78-5100-2396-9  
 78-5100-2437-1  
 DESIGN REFERENCE NEXT ASSEMBLY

DRFT	ARM	DATE	MFG	DATE
		FEB 11, 2011		
CHKD		DATE	APPR	DATE
			SAN	FEB 11, 2011

DIVISION EMSD

DO NOT SCALE DRAWING

SCALE 4/1

TOLERANCES EXCEPT AS NOTED

INCHES  
 .0 ± .1  
 .00 ± .02  
 .000 ± .010  
 .0000 ± .005

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX SURFACE ROUGHNESS

ALL SURFACES

MARKED ONLY

ANGLES

3M Center St. Paul, MN 55144

© 3M COPYRIGHT 2022  
 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.

TITLE  
 RIBBON CABLE WMT SOCKET, .05 X .05 PITCH, 451 SERIES

CAGE NUMBER D78-5100-2436-3

SIZE 451

DRAWING NO. 78-5100-2436-3

REV. K

MODEL 451

DET [ ] YES [X] NO

SHT 2 OF 3

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION  
 INTERCONNECT SOLUTIONS  
<http://www.3M.com/interconnect>  
 3M IS A TRADEMARK OF 3M COMPANY.  
 FOR TECHNICAL, SALES OR ORDERING  
 INFORMATION CALL 800-225-5373

78-5100-2436-3 K REVISION

DRAWING NUMBER

B

A

# 3M™ RIBBON CABLE WIREMOUNT SOCKET ASSEMBLY, 451 SERIES

.050" X .050" (1.27MM X 1.27MM) FOR .025" PITCH CABLE

**Regulatory:** For regulatory information about this product, visit [3M.com/regs](http://3M.com/regs) or contact your 3M representative.

**Technical Information:** The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product in accordance with all applicable instructions and with appropriate safety equipment, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

**Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement or repair of the 3M product or refund of the purchase price.

**Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by applicable law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

**Disclaimer:** For industrial use only. Not intended, labeled or packaged for consumer sale or use.

3M Company  
 Electronics Materials Solutions Division  
 13011 McCallen Pass, Bldg. C  
 Austin, TX 78753-5380  
 1-800-225-5373  
[www.3M.com/interconnect](http://www.3M.com/interconnect)

3M ELECTRONICS MATERIALS SOLUTIONS DIVISION  
 INTERCONNECT SOLUTIONS  
<http://www.3M.com/interconnect>

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

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
K	106347	AUG 19, 2022 ADD TABLE 2 FOR CABLE	JNC	SAN
J	105041	MAY 26, 2022 REVISE PERFORMANCE SECTION	JNC	SAN
H	100200	OCT 19, 2021 ADD POS 26, 40, 50	JNC	SAN
G	92270	AUG 19, 2020 ADD NOTES AND VIEWS	JNC	SAN
F	56988	SEP 24, 2014 REVISE PERFORMANCE CHART	JNC	SN
E	54514	MAY 07, 2014 ADD UL LOGO	SJS	SAN
D	51884	JAN 08, 2014 ADD DESIGN REF, UPDATE TITLE, ADD TS REF	SJS	SAN
C	50290	OCT 08, 2013 REVISE NOTES 1, 3, 8 & OPERATING TEMP.	JNC	SN
B	48635	JUL 12, 2013 MATCH TEXT FONTS & ADD NOTE 10	JNC	SN
A	46797	MAR 25, 2013 PRODUCTION RELEASE	JNC	SAN

78-5100-2396-9  
 78-5100-2437-1  
 DESIGN REFERENCE NEXT ASSEMBLY

DRFT	ARM	DATE	MFG	DATE
CHKD	ARM	FEB 11, 2011	SAN	FEB 11, 2011

DIVISION CODE: EMSD

DO NOT SCALE DRAWING

SCALE: 4/1

TOLERANCES EXCEPT AS NOTED

INCHES	± .1
.00	± .02
.000	± .010
.0000	± .005

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX SURFACE ROUGHNESS

MARKED SURFACES

MARKED ONLY

MILLIMETERS

0 ±

.0 ±

.00 ±

.000 ±

ANGLES ±

3M Center St. Paul, MN 55144

© 3M COPYRIGHT 2022  
 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.

TITLE: RIBBON CABLE WMT SOCKET, .05 X .05 PITCH, 451 SERIES

CAGE NUMBER	SIZE	DRAWING NO.	REV.
D	78-5100-2436-3	K	

MODEL: 451

DET:  YES  NO

SHT 3 OF 3

78-5100-2436-3  
K  
Revision