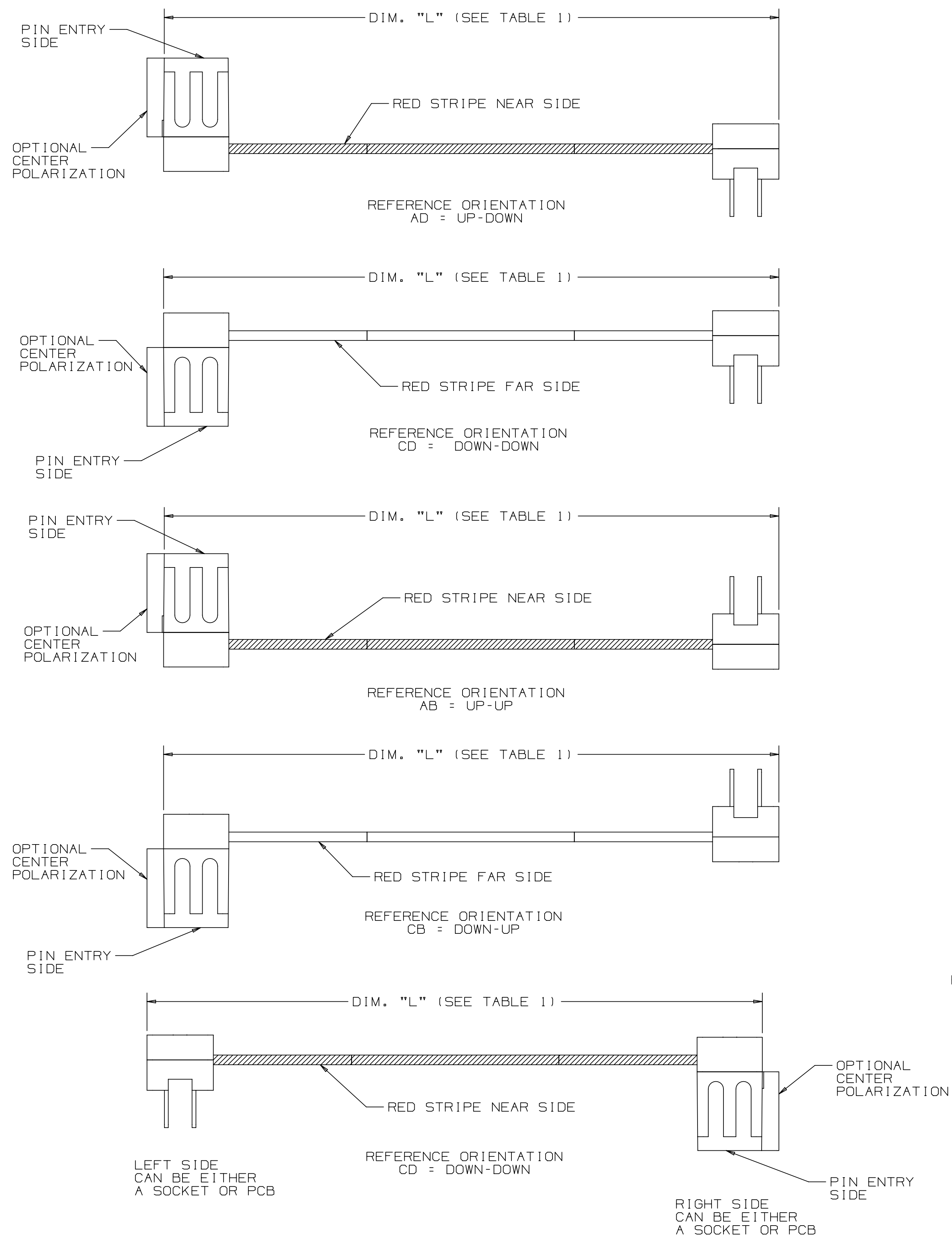


3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR



MOLDED SOCKET:

- * PART OF COMPLETE CABLE ASSEMBLY
- * MATES WITH INDUSTRY STANDARD .025" SQUARE CONTACTS ON .100" BY .100" CENTERS
- * ONE PIECE, MOLDED-ON CONSTRUCTION WITH INTEGRAL STRAIN RELIEF
- * HIGH AND LOW PROFILES AVAILABLE, BOTH ACCOMMODATE TYPICAL HEADER LATCHES (SHORT AND LONG)
- * SLOTTED ENDS ALLOW MATING TO CONTINUOUS ROW HEADERS
- * INDUSTRY STANDARD POLARIZATION
- * MOLDED-ON POLARITY KEYS AVAILABLE ON SELECTED CONNECTOR SIZES
- * CLOSED END CONSTRUCTION
- * MODULAR TOOLING ALLOWS CUSTOMIZED DESIGNS

MOLDED PCB:

- * PART OF COMPLETE CABLE ASSEMBLY
- * MATES WITH INDUSTRY STANDARD .100 INCH X .100 INCH BOARD PATTERN
- * ONE PIECE, MOLDED-ON CONSTRUCTION WITH INTEGRAL STRAIN RELIEF
- * STANDARD AND RETENTION CONTACTS AVAILABLE
- * LOW PROFILE PERMITS CLOSE PC BOARD SPACING
- * CLOSED END CONSTRUCTION

2 PHYSICAL:

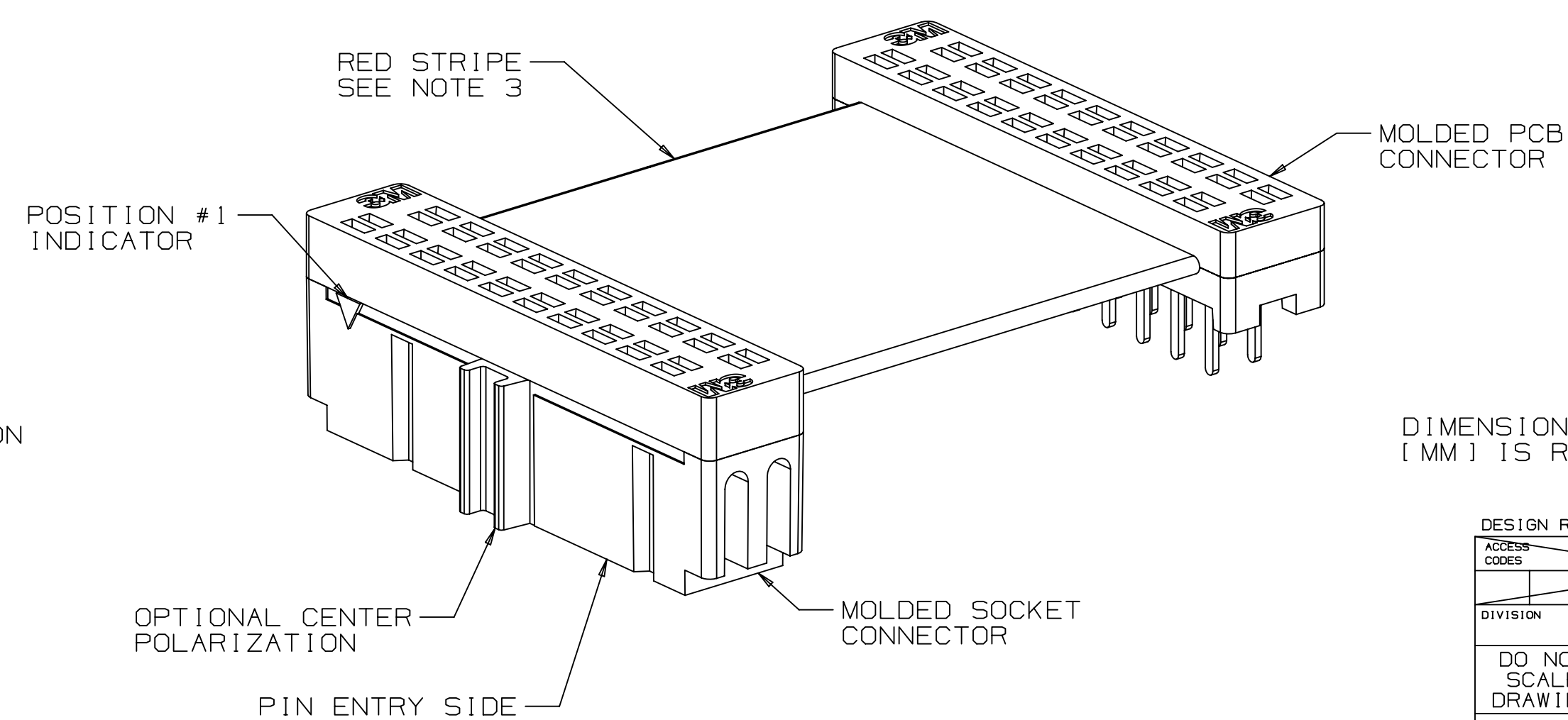
- INSULATOR: GLASS FILLED POLYESTER (PBT)
 MATERIAL: UL94V-0
 FLAMMABILITY: GREY
 COLOR: COPPER ALLOY
 CONTACT: COPPER ALLOY
- PLATING SOCKET:
 UNDERPLATING & U-SLOT: 50 - 150 μm [1.27 - 3.81 μm] NICKEL
 WIPING AREA: 30 μm [0.76 μm] GOLD AVG
- PLATING PCB:
 UNDERPLATING & U-SLOT: 50 - 150 μm [1.27 - 3.81 μm] NICKEL
 CONTACT TAIL: 300-400 μm [7.62-10.16 μm] MATTE TIN
- WIRE ACCOMMODATION: 26 AND 28 AWG SOLID AND STRANDED
 COVER/STRAIN RELIEF RETENTION: 5N MIN PER CONTACT
- MARKINGS: 3M LOGO AND ORIENTATION TRIANGLE (SOCKET ONLY)

2 ELECTRICAL:

- CURRENT RATING: 1A
 INSULATION RESISTANCE: >1X10⁹Ω AT 500V_{DC}
 WITHSTANDING VOLTAGE: 1000V_{RMS} AT SEA LEVEL
 VOLTAGE RATING: 30V

2 ENVIRONMENTAL:

- TEMPERATURE RATING: -55C TO 105°C
 NOTE: THE TEMPERATURE RANGE CAN BE LIMITED BY THE SELECTED CABLE.



DIMENSIONS: INCHES [MM]
 [MM] IS REFERENCE ONLY

DESIGN REFERENCE	NEXT ASSEMBLY
DO NOT SCALE DRAWING	SCALE 4/1
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018
MAX SURFACE ROUGHNESS	ALL SURFACES MARKED ONLY
TOLERANCES EXCEPT AS NOTED	INCHES: .00 ± .01, .000 ± .005, .0000 ± .0002; MILLIMETERS: 0 ± .005, .00 ± .005, .000 ± .0002

NOTES	
1	REGULATORY INFORMATION: VISIT 3M.com/regs
2	IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
3	CABLE RED STRIPE CAN BE EITHER NEAR SIDE OR FAR SIDE, DEPENDING ON THE ORIENTATION OF THE SOCKET POSITION 1 INDICATOR.

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UL **us**
 UL FILE NO: E86982

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
1		MAR 04, 2022 MFG		
2		APR 29, 2022 APPVL		
CAGE NUMBER		SIZE	DRAWING NO.	REV.
D			78-5100-2754-9	B
MODEL		IM	DET: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO SHT 1 OF 5	

78-5100-2754-9 DRAWING NUMBER

B REVISION

A

3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR

3M™ MOLDED SOCKET CONNECTOR
 871 SERIES

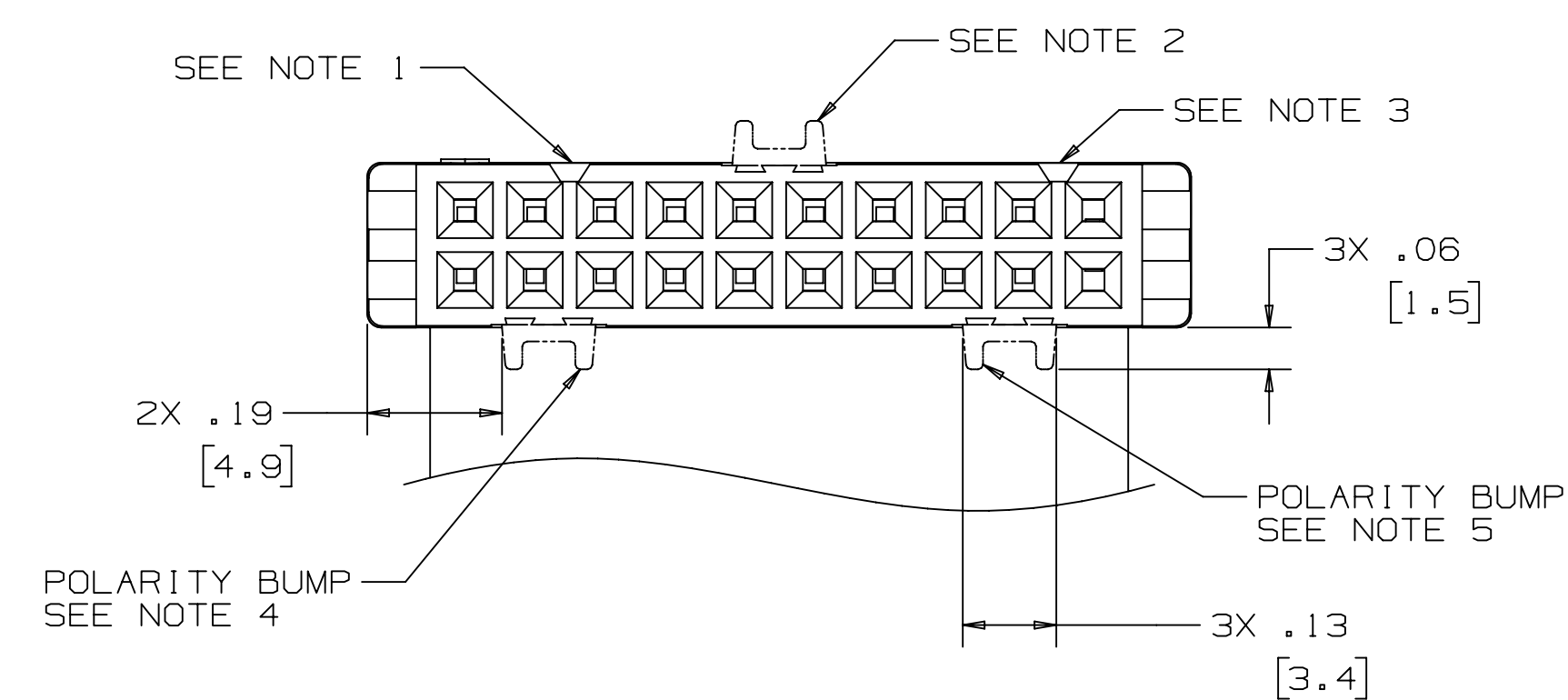
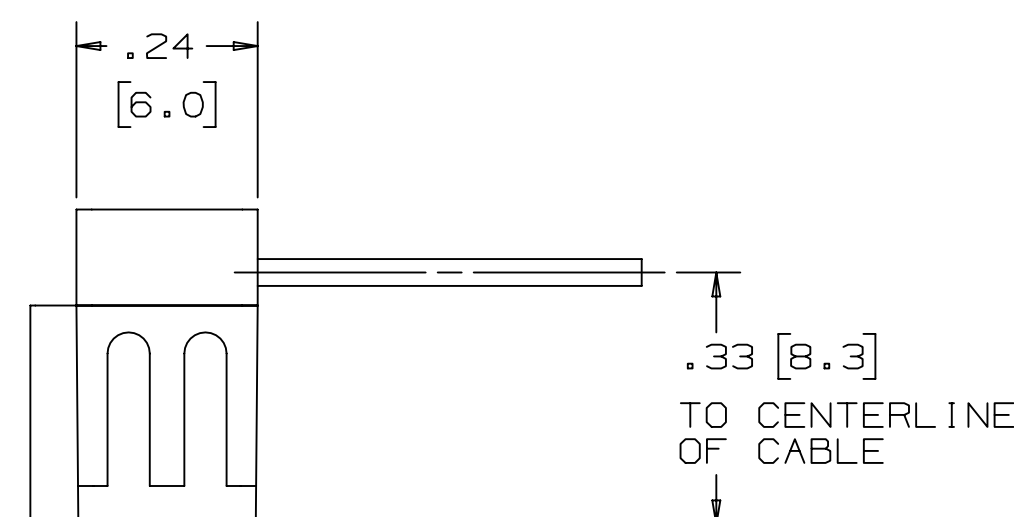
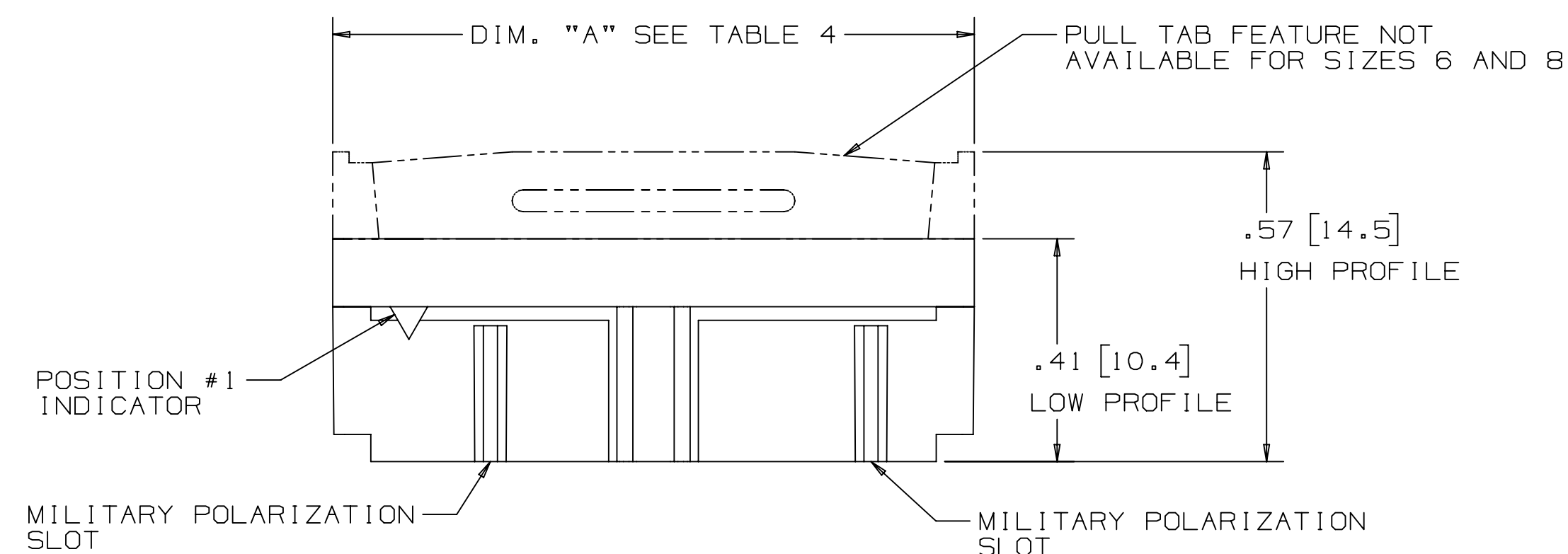
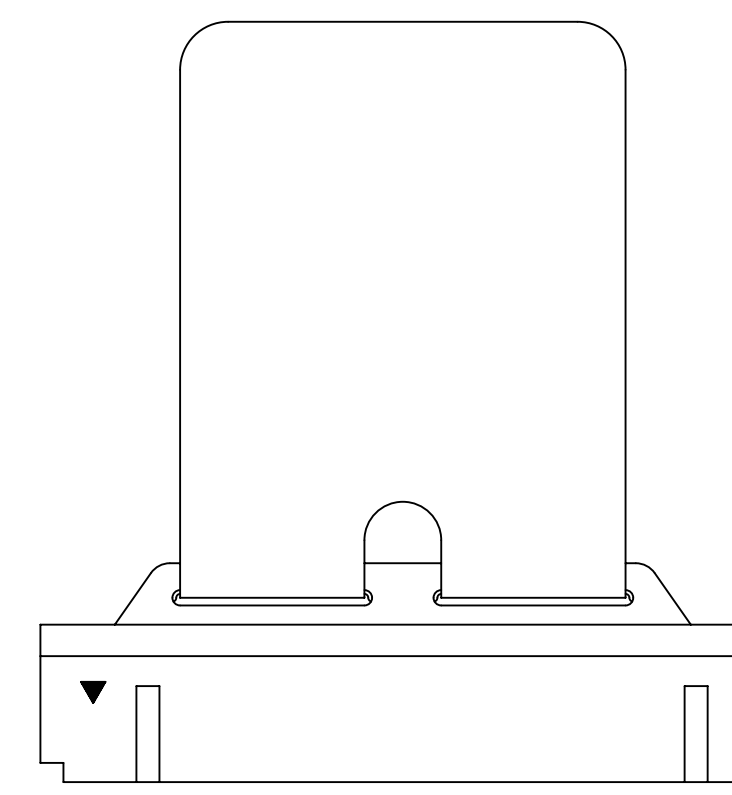
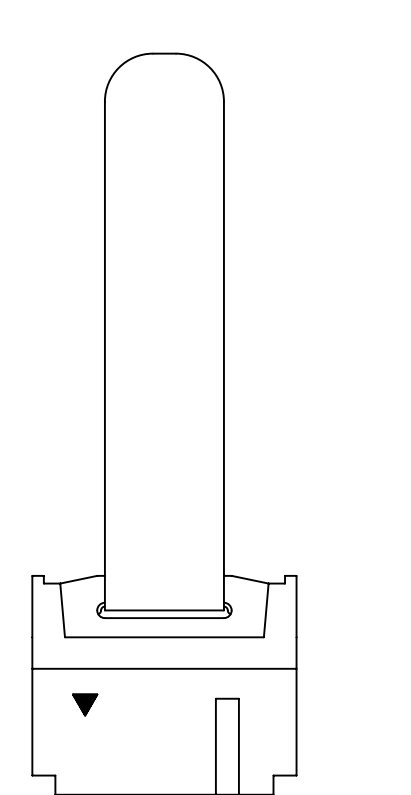
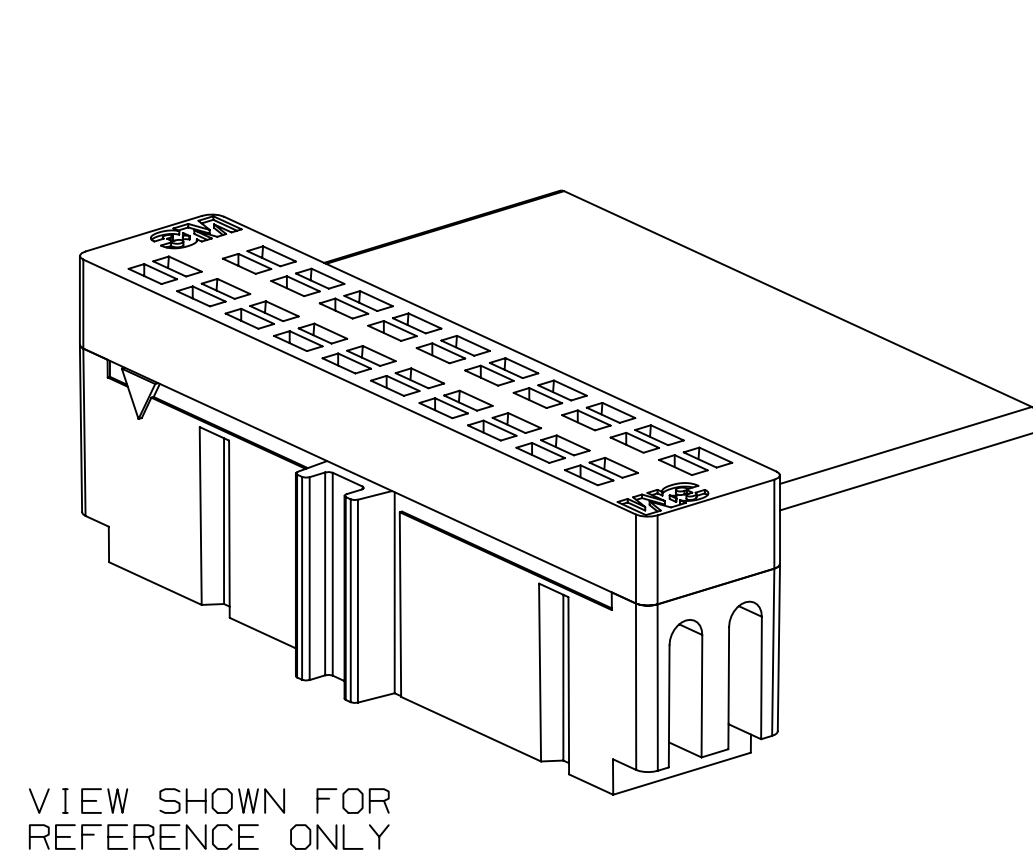


TABLE 4	
CONTACT QTY	DIM A
6	.48 [12.2]
8	.58 [14.7]
10	.68 [17.3]
12	.78 [19.8]
14	.88 [22.4]
16	.98 [24.9]
20	1.18 [30.0]
24	1.38 [35.1]
26	1.48 [37.6]
30	1.68 [42.7]
34	1.88 [47.8]
36	1.98 [50.3]
40	2.18 [55.4]
50	2.68 [68.1]
60	3.18 [80.8]
64	3.38 [85.9]

- NOTES:
1. THIS POLARIZATION SLOT IS NONEXISTENT ON SIZES 6, 8, 10, 12 AND 14.
 2. OPTIONAL CENTER POLARIZATION FEATURE.
 3. THIS POLARIZATION SLOT IS NONEXISTENT ON SIZES 6 AND 8.
 4. DUAL POLARIZATION BUMPS ARE NOT OFFERED ON SIZES 6, 8, 10 AND 12.
 5. POLARIZATION BUMP AT THIS LOCATION NOT OFFERED ON SIZES 10 AND 12.

PULL TAB FEATURES VARY WITH CONNECTOR SIZE



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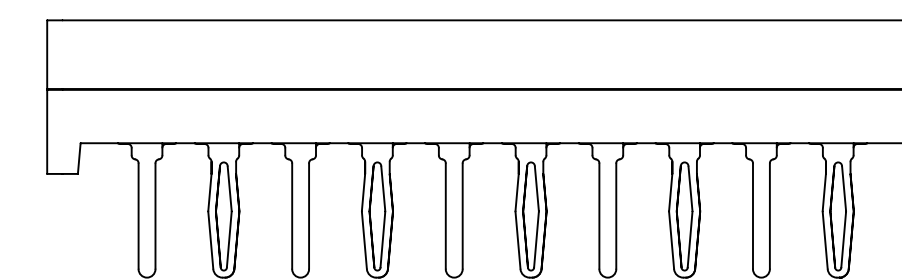
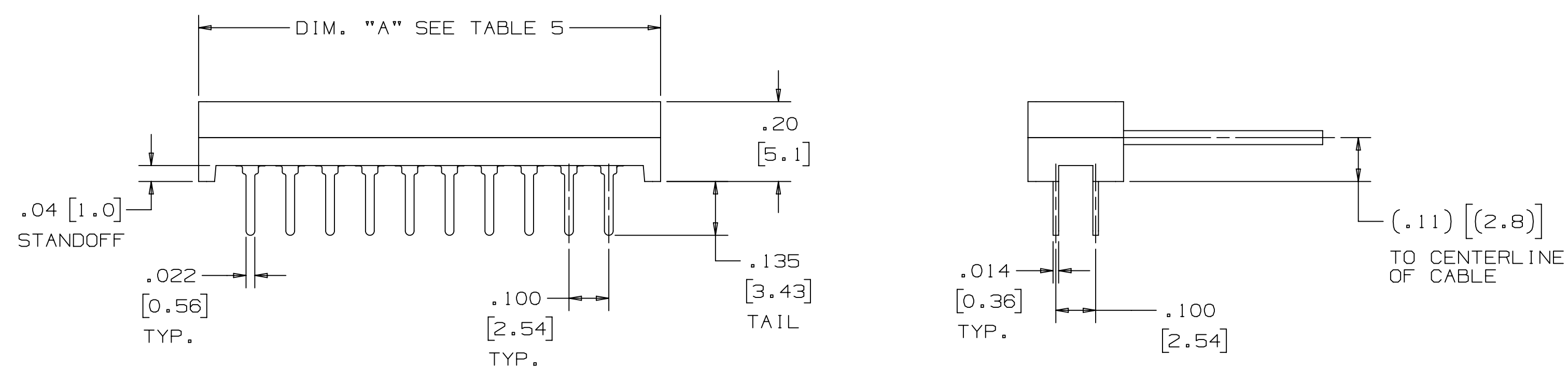
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DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		DRFT	L. SCHMIDT	DATE	MAR 04, 2022	MFG
		CHKD	J. GOERTZ	DATE	APR 29, 2022	APPL
DIVISION		DIVISION CODE				
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION		INCHES				
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS				
MAX SURFACE ROUGHNESS		ANGLES				
MARKED ONLY		CAGE NUMBER				
		DRAWING NO.				
		REV.				
		MODEL				

B	108514	JAN 19, 2023	JNC	JC
A	0104943	MAY 27, 2022	LDS	JG
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
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3M Center St. Paul, MN 55144				
TITLE				
MOLDED CABLE ASSY				
.100 WITH SOCKET AND PCB CONNECTORS				
CAGE NUMBER				
D 78-5100-2754-9				
REV.				
B				
MODEL				
IM				
DET				
YES NO SHT 3 OF 5				

3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR

3M™ MOLDED 2-ROW PCB CONNECTOR
 878 SERIES



RETENTION CONTACTS ORIENTED AS SHOWN—
 EVERY OTHER CONTACT WITH THE FIRST AND
 SECOND ROW ORDER SHIFTED BY ONE
 CONTACT. (ORIENTATION IS NOT BASED ON
 DELTA LOCATION AND MAY VARY FROM
 CONNECTOR TO CONNECTOR)

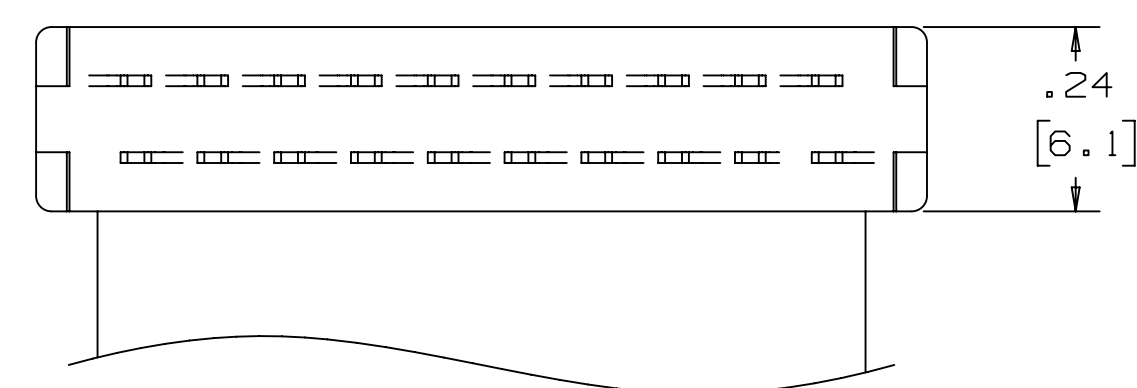
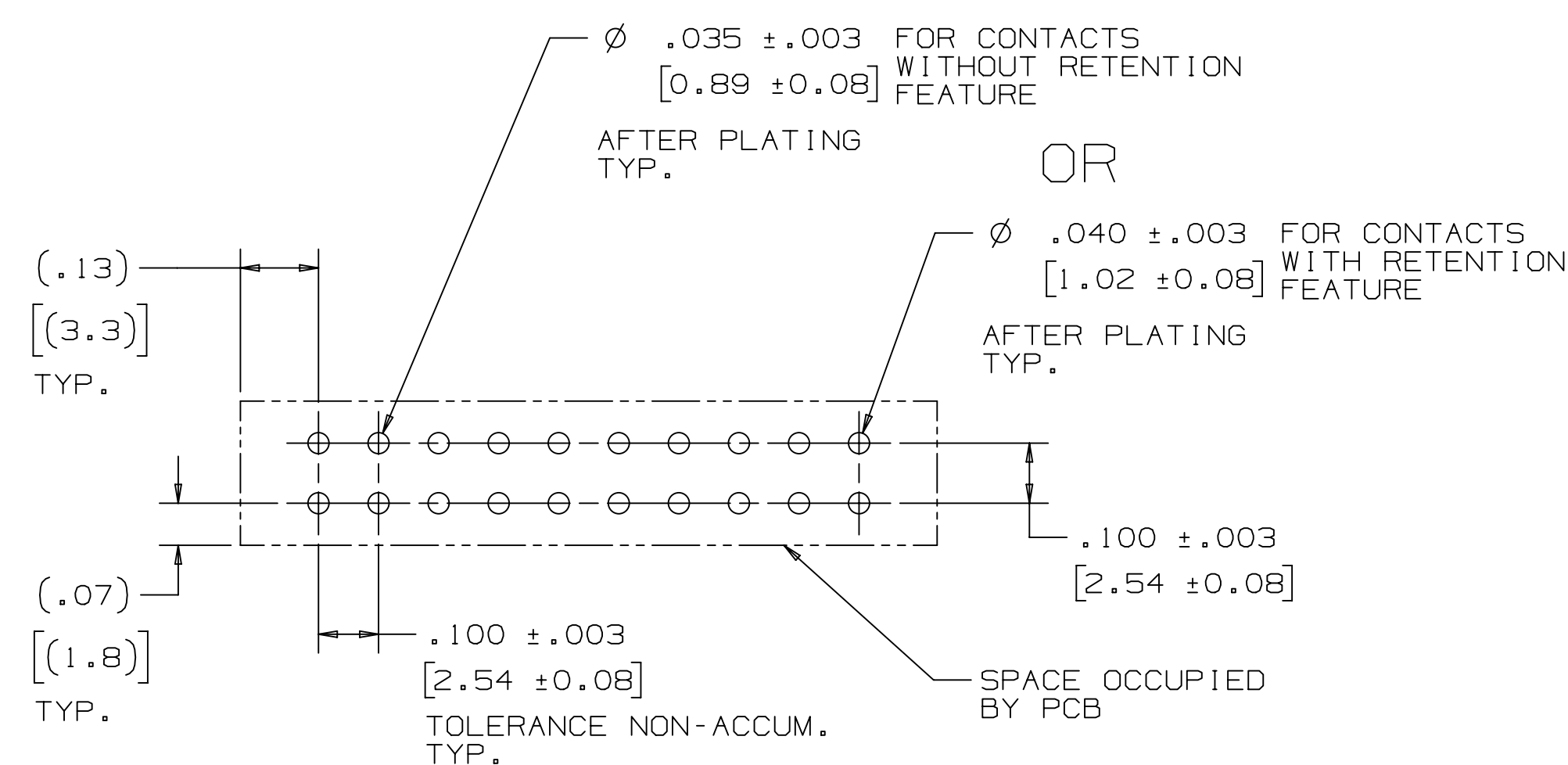
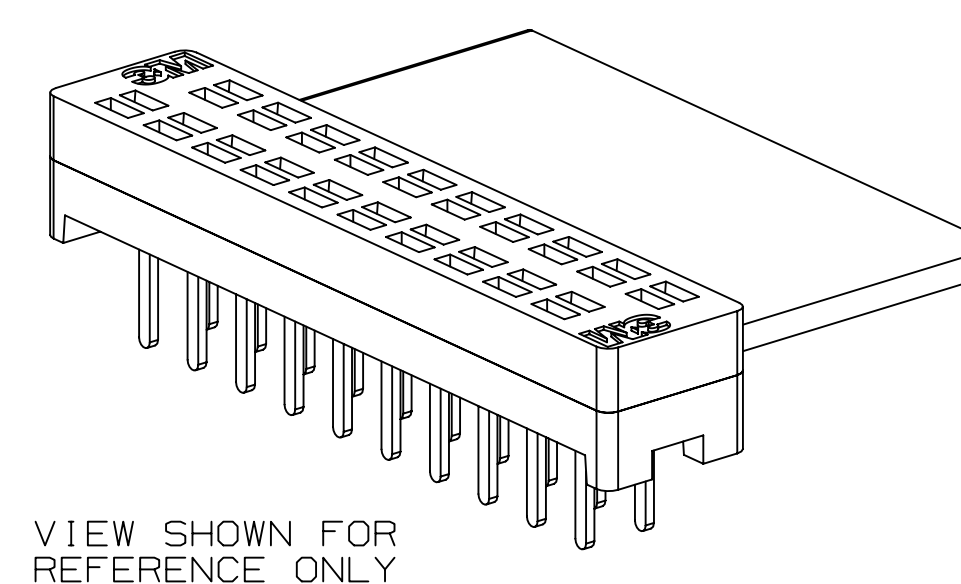


TABLE 5	
CONTACT QTY	DIM. "A"
06	.46 [11.7]
08	.56 [14.2]
10	.66 [16.8]
14	.86 [21.8]
16	.96 [24.4]
20	1.16 [29.5]
24	1.36 [34.5]
26	1.46 [37.1]
30	1.66 [42.1]
34	1.86 [47.2]
36	1.96 [49.8]
40	2.16 [54.9]
44	2.36 [59.9]
50	2.66 [67.6]
60	3.16 [80.3]
64	3.36 [85.3]



RECOMMENDED MOUNTING HOLE PATTERN
 (SHOWN FROM MOUNTING SIDE OF BOARD)



VIEW SHOWN FOR
 REFERENCE ONLY

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		DRFT	L. SCHMIDT	DATE	MAR 04, 2022	MFG
		CHKD	J. GOERTZ	DATE	APR 29, 2022	APPL
DIVISION		DIVISION CODE				
DO NOT SCALE DRAWING	SCALE 4/1	TOLERANCES EXCEPT AS NOTED				
THIRD ANGLE PROJECTION		INCHES .00 ± .01 .000 ± .005 .0000 ± .0002				
INTERPRET PER ASME Y14.5 - 2018		MILLIMETERS 0 ± .0 ± .00 ± .000 ±				
MAX. SURFACE ROUGHNESS		ANGLES				
ALL SURFACES MARKED ONLY						
CAGE NUMBER		SIZE		DRAWING NO.		REV.
D		IM		78-5100-2754-9		B
MODEL		IM		DET		SHT 4 OF 5

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TITLE
 MOLDED CABLE ASSY
 .100 WITH SOCKET AND
 PCB CONNECTORS

78-5100-2754-9
 DRAWING NUMBER

B

REVISION

A

3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR

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		CHKD	J GOERTZ	DATE	APR 29, 2022	APPL
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		INCHES .0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002		TITLE MOLDED CABLE ASSY .100 WITH SOCKET AND PCB CONNECTORS		
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	MILLIMETERS		CAGE NUMBER D 78-5100-2754-9		
MAX SURFACE ROUGHNESS	ALL SURFACES	0 ± .0 ± .00 ± .000 ±		DRAWING NO. 78-5100-2754-9		
<input checked="" type="checkbox"/> MARKED ONLY	ANGLES	MODEL 1M		REV. B		

78-5100-2754-9
DRAWING NUMBER

A

SHT 5 OF 5