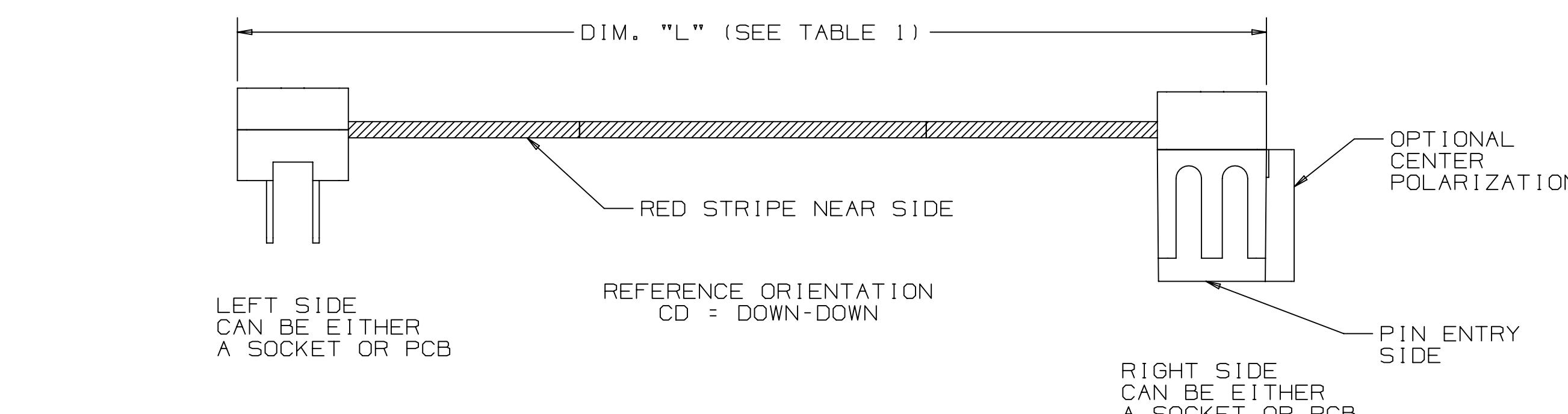
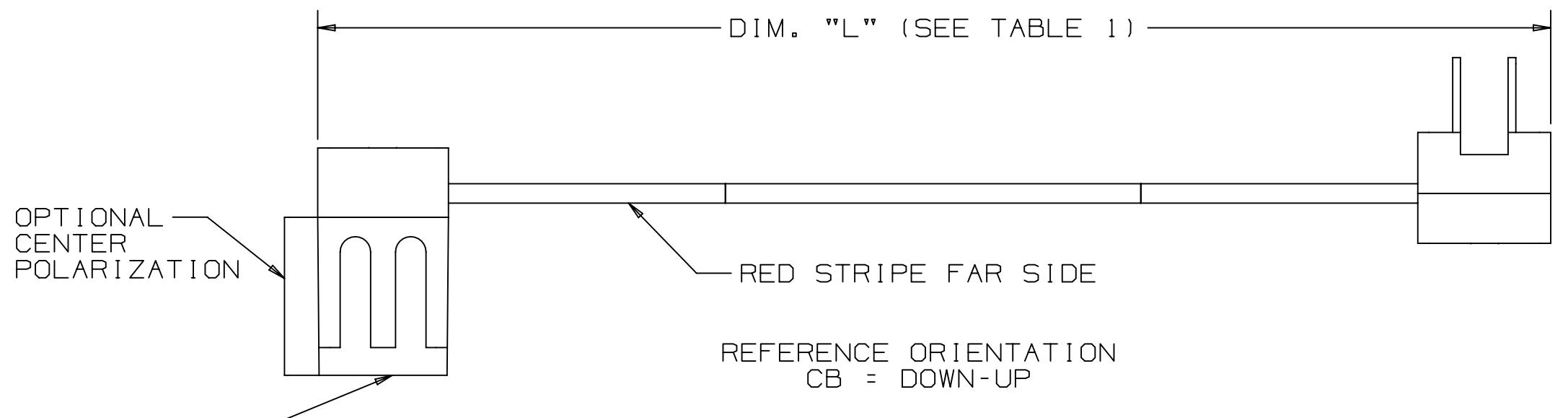
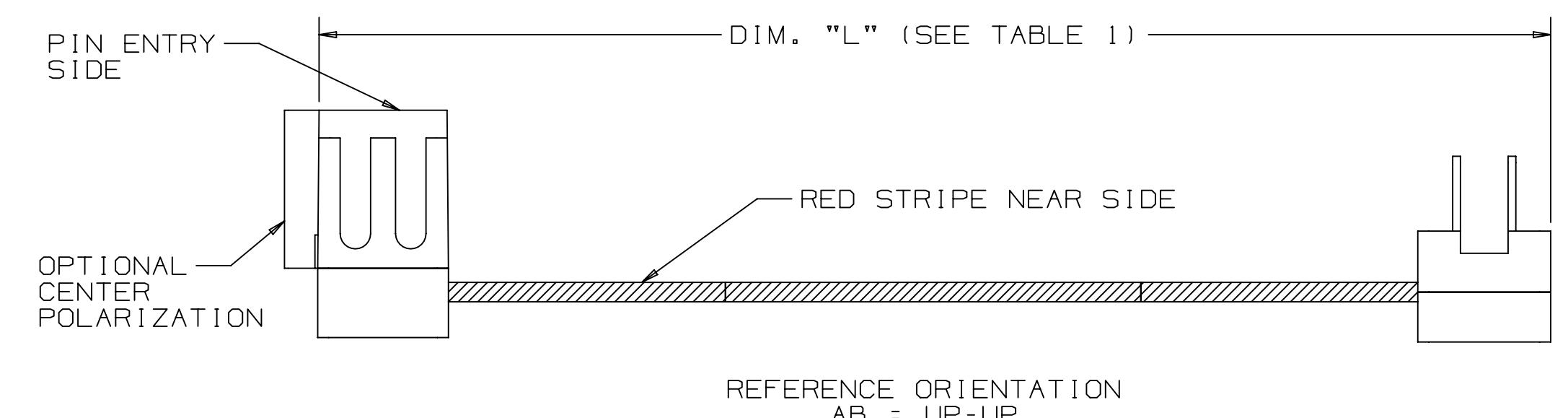
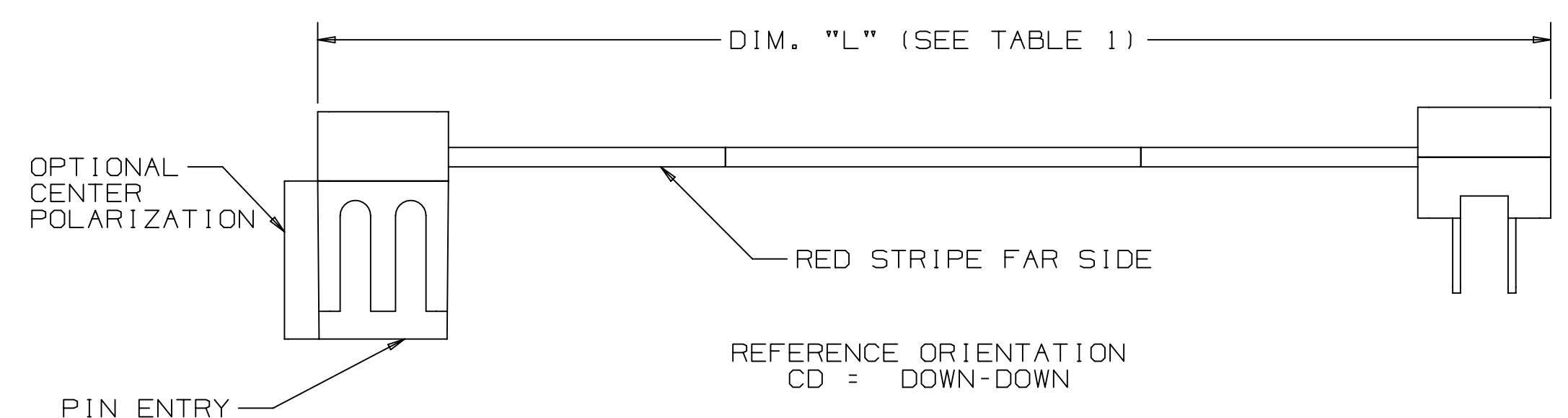
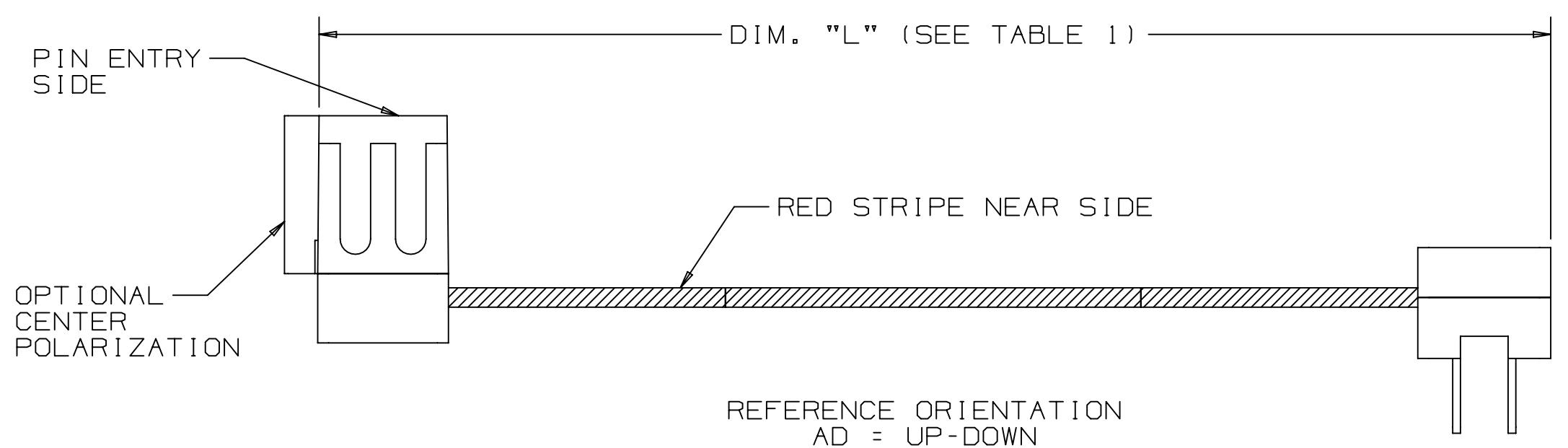


8 7 6 5 4 3 2 1
 3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR



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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:
 MATERIAL: GLASS FILLED POLYESTER (PBT)
 FLAMMABILITY:
 COLOR: UL94V-0
 CONTACT:
 MATERIAL: GREY COPPER ALLOY

PLATING SOCKET:
 UNDERPLATING & U-SLOT: 50 - 150 μ [1.27 - 3.81 μ m] NICKEL
 WIPING AREA: 30 μ [0.76 μ m] GOLD AVG

PLATING PCB:
 UNDERPLATING & U-SLOT: 50 - 150 μ [1.27 - 3.81 μ m] NICKEL
 CONTACT TAIL: 300-400 μ [7.62-10.16 μ m] MATTE TIN

WIRE ACCOMMODATION: 26 AND 28 AWG SOLID AND STRANDED
 COVER/STRAIN RELIEF RETENTION: 5N MIN PER CONTACT

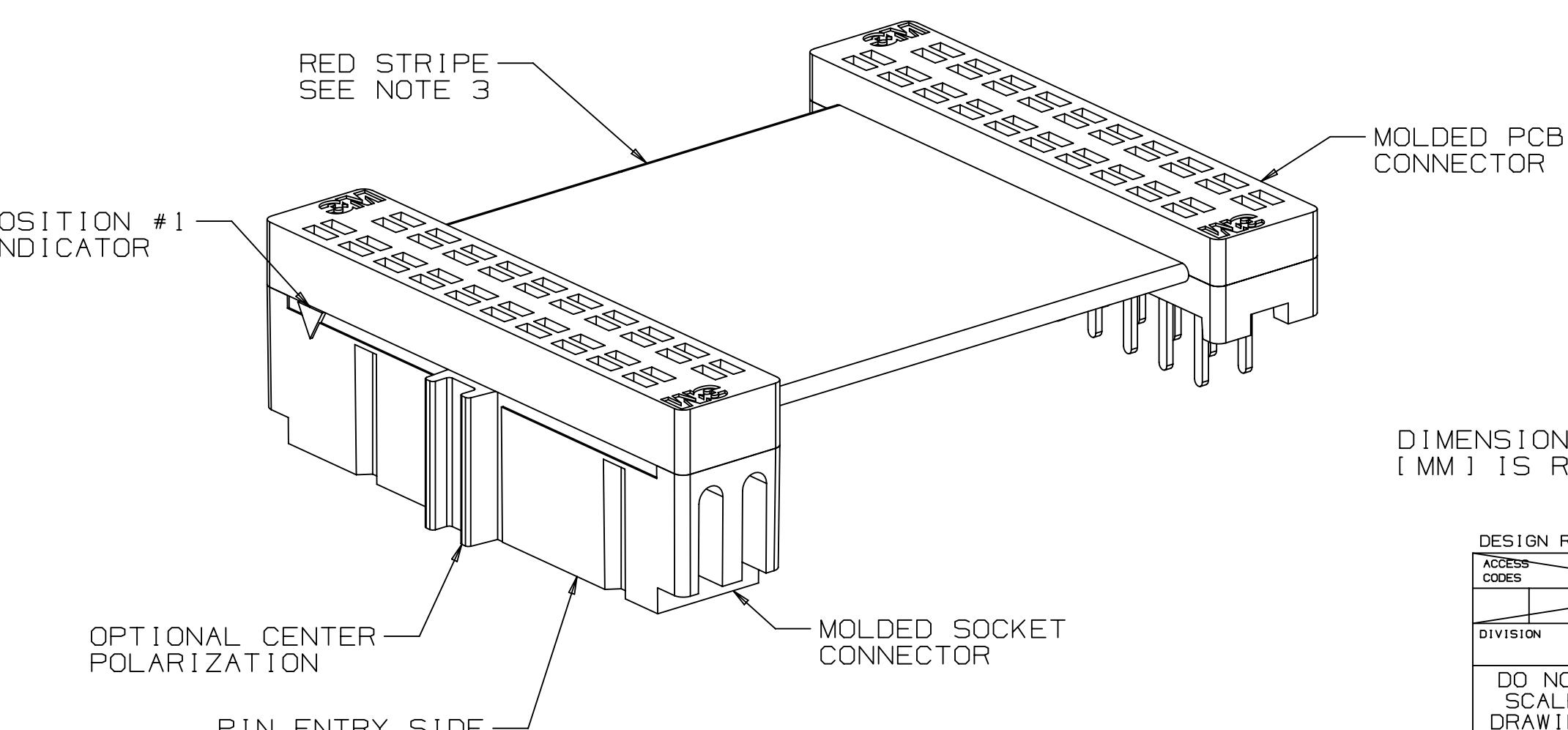
MARKINGS: 3M LOGO AND ORIENTATION TRIANGLE (SOCKET ONLY)

② ELECTRICAL:

CURRENT RATING: 1A
 INSULATION RESISTANCE: $>1 \times 10^9 \Omega$ AT 500V_{DC}
 WITHSTANDING VOLTAGE: 1000V_{RMS} AT SEA LEVEL
 VOLTAGE RATING: 30V

② ENVIRONMENTAL:

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



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

DESIGN REFERENCE NEXT ASSEMBLY

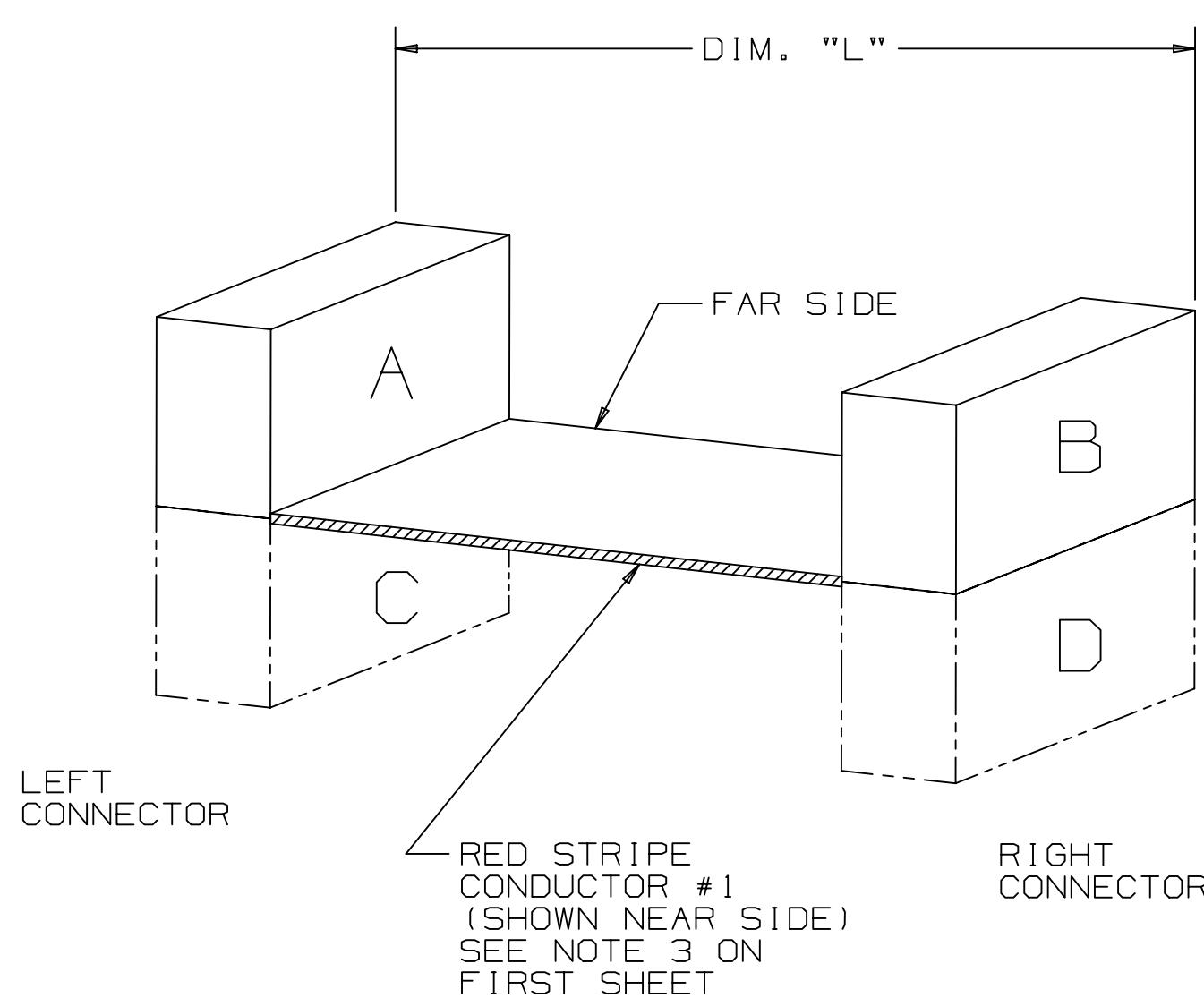
REV ECO ISSUE DATE AND DESCRIPTION DRFT CHKD

DRFT L. SCHMIDT DATE APR 04, 2022 MFG DATE

DRFT J. GOERTZ DATE APR 29, 2022 APPV DATE

B	108514	JAN 19, 2023	JNC	JC
A	0104943	MAY 27, 2022	LDS	JG
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT	L. SCHMIDT	DATE APR 04, 2022	MFG	DATE
DRFT	J. GOERTZ	DATE APR 29, 2022	APPV	DATE
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3M Center St. Paul, MN 55144				
MOLDED CABLE ASSY .100 WITH SOCKET AND PCB CONNECTORS				
CAGE NUMBER D 78-5100-2754-9 REV. B				
DET. LISTS YES NO SHT 1 OF 5				

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



NOTE:

1. A FANOUT ASSEMBLY, WITH MULTIPLE CONNECTORS ON ONE END, REQUIRES A DRAWING SUBMITTAL AND REVIEW.
2. SEE ORDERING INFORMATION FOR CONNECTOR ORIENTATION OPTIONS.

TABLE 1		
DIM L		TOLERANCE
MIN	MAX	
1.7	10.0	±0.3
10.0	20.0	±0.5
20.0	40.0	±0.6
40.0	120.0	±1.0
120.0		±2.0

TABLE 2 AVAILABLE OPTIONS																	
CONNECTOR POSITION	6	8	10	12	14	16	20	24	26	30	34	36	40	44	50	60	64
SOCKET	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PCB	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
ALL CABLES	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CABLE CONDUCTORS	6	8	10	12	14	16	20	24	26	30	34	36	40	44	50	60	64

TABLE 3 - SEE NOTE BELOW								
CONNECTOR SPACING	AWG	CABLE SERIES	TECHNICAL DATA SHEET	PITCH	CONDUCTOR TYPE	INSULATION MATERIAL	SPECIAL FEATURE	CABLE TEMPERATURE RATING
.100 ^{**}	26 AWG	3801	TS-0063	.050 ^{**}	STRANDED	PVC		-20°C TO +105°C
		3811	TS-0122	.050 ^{**}	STRANDED	PVC	COLOR CODED	-20°C TO +105°C
	28 AWG	3365	TS-0080	.050 ^{**}	STRANDED	PVC		-20°C TO +105°C
		HF365	TS-2334	.050 ^{**}	STRANDED	PO		-40°C TO +105°C
		3355	TS-0317	.050 ^{**}	STRANDED	TPE		-40°C TO +105°C
		3601	TS-0553	.050 ^{**}	STRANDED	FEP		-55°C TO +200°C
		3539	TS-0058	.050 ^{**}	STRANDED	PVC	MEDIUM FLEX	-20°C TO +105°C
		3319	TS-0059	.050 ^{**}	STRANDED	PVC	HIGH FLEX	-20°C TO +105°C
		3302	TS-0123	.050 ^{**}	STRANDED	PVC	COLOR CODED	-20°C TO +105°C
		HF539	TS-2565	.050 ^{**}	STRANDED	PO	MEDIUM FLEX	-40°C TO +105°C
		HF319	TS-2342	.050 ^{**}	STRANDED	PO	HIGH FLEX	-40°C TO +105°C

NOTE: FOR PREFERENCE ONLY. CONFIRM CABLE SPECIFICATION USING CABLE TECHNICAL DATA SHEET.

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ORDERING INFORMATION

1 M   -  -  -  -  .  -  -  - 

NUMBER OF
CABLE
CONDUCTOR

ASSEMBLY LENGTH
TIP-TO-TIP INCHES
(DIM A IN INCHES
EXAMPLE:
001.7 = 1.7" MIN)

MARKING
0 = NO MARKING
1 = LABEL-DATE CODE
2 = INKSTAMP-DATE CODE

LEFT RIGHT
CENTER POLARIZATION ORIENTATION OPTIONS
0 = NONE
1 = INSIDE
2 = OUTSIDE

CONNECTOR ORIENTATION OPTIONS
(LEFT AND RIGHT)

AB = UP-UP
AD = UP-DOWN
CB = DOWN-UP
CD = DOWN-DOWN

LEFT RIGHT
CONNECTOR FEATURE OPTIONS
0 = NO PULL TAB OR KEYING REQUIRED
1 = PULL TAB (SOCKET ONLY, NOT AVAILABLE ON 6 OR 8 CONTACT QUANTITY)
2 = KEYING REQUIRED, SPECIFY POSITION(S)
3 = PULL TAB AND KEYING REQUIRED, SPECIFY POSITION(S)

REFERENCE		NEXT ASSEMBLY		PRODUCTION RELEASE			
REV	ECO	ISSUE DATE AND DESCRIPTION			DRFT	CHKD	
		DRFT L SCHMIDT		DATE MAR 04, 2022	MFG DATE		
		CHKD J GOERTZ		DATE APR 29, 2022	APPVL DATE		
		DIVISION CODE		 3M Center St. Paul, MN 55144			
OT E NG		SCALE <u>4</u> <u>1</u>		© 3M COPYRIGHT 2023 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.			
		TOLERANCES EXCEPT AS NOTED		TITLE MOLDED CABLE ASSY 100 WITH SOCKET AND PCB CONNECTORS			
SINGLE PROJECTION		INCHES					
INTERPRET PER Y14.5 - 2018		.0 \pm .1 .00 \pm .01 .000 \pm .005 .0000 \pm .0002					
SURFACE ROUGHNESS		MILLIMETERS					
<input type="checkbox"/> ALL SURFACES		0 \pm .0 \pm .00 \pm .000 \pm					
<input type="checkbox"/> MARKER ONLY				CAGE NUMBER	SIZE D	DRAWING NO. 78-5100-2754-9	REV. B
				MODEL	DET.	DET.	DET.

8 7 6 5 4 3 2 1
 3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR

D D
 3M™ MOLDED SOCKET CONNECTOR
 871 SERIES

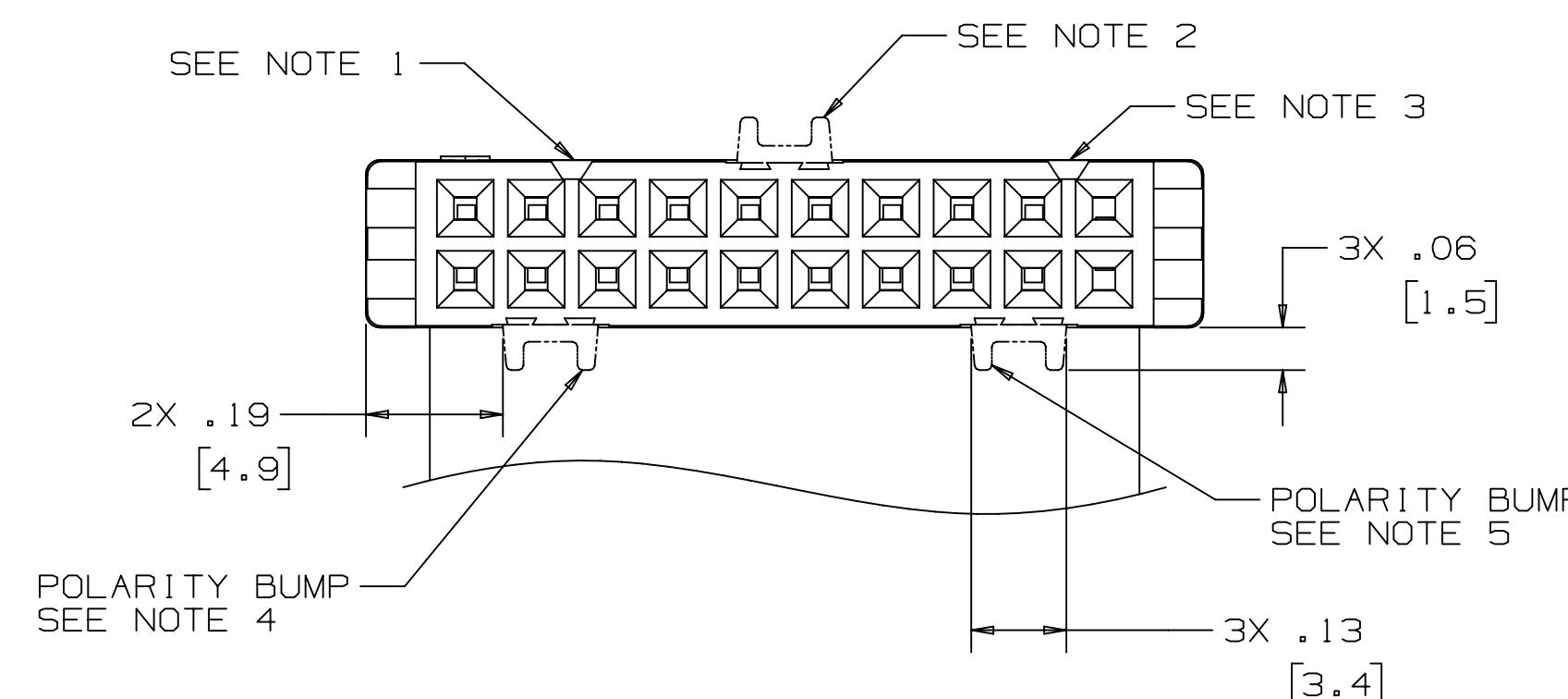
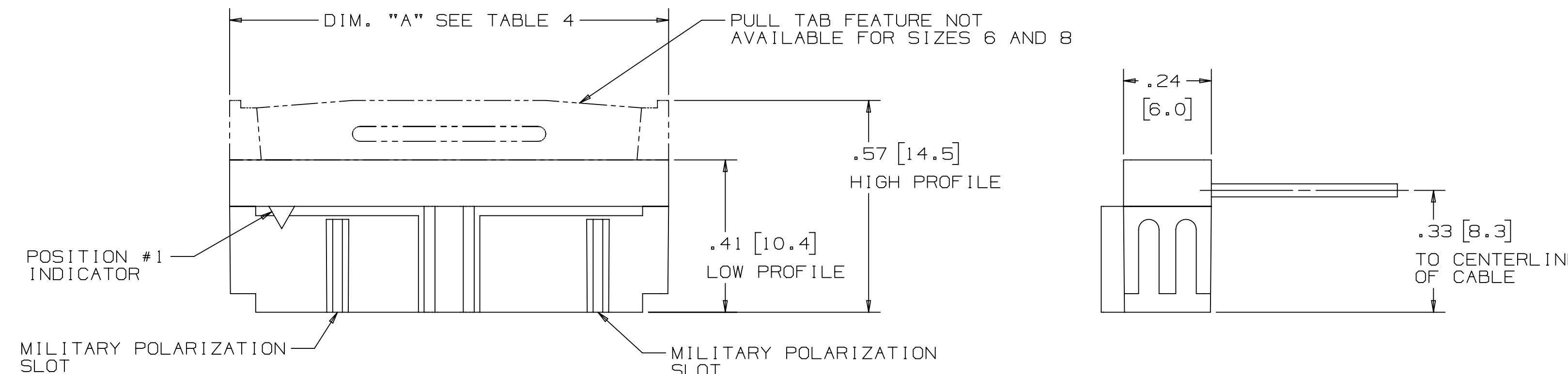
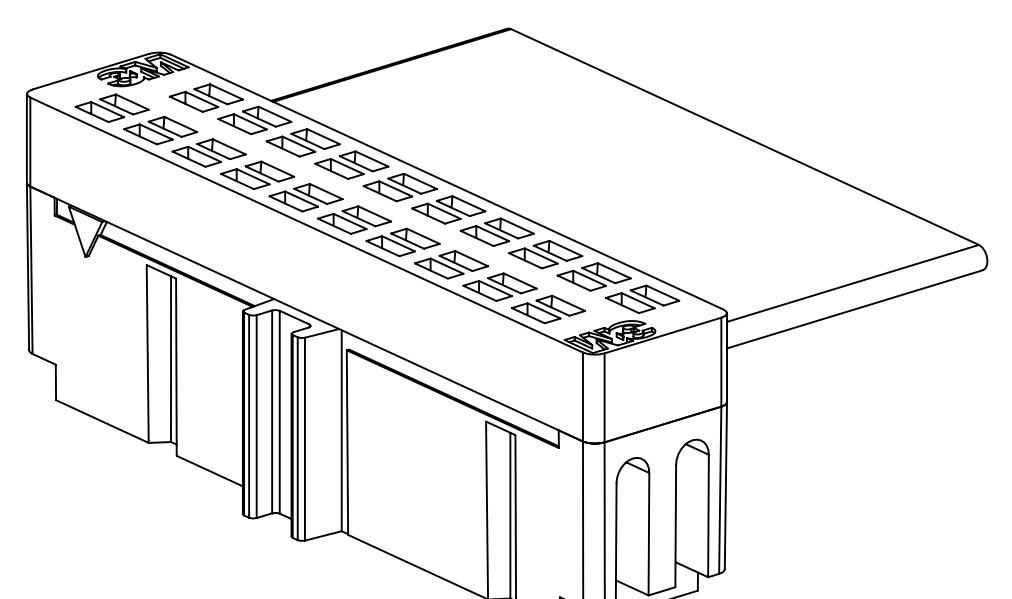


TABLE 4	
CONTACT QTY	DIM A
6	.48 [12.2]
8	.58 [14.7]
10	.68 [17.3]
12	.78 [19.8]
14	.88 [22.4]
16	.98 [24.9]
20	1.18 [30.0]
24	1.38 [35.1]
26	1.48 [37.6]
30	1.68 [42.7]
34	1.88 [47.8]
36	1.98 [50.3]
40	2.18 [55.4]
50	2.68 [68.1]
60	3.18 [80.8]
64	3.38 [85.9]

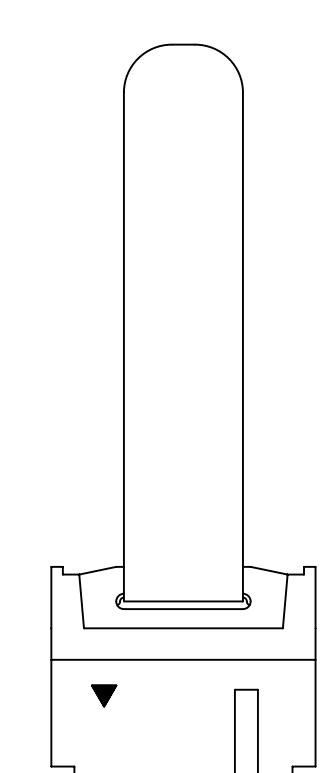
NOTES:

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.

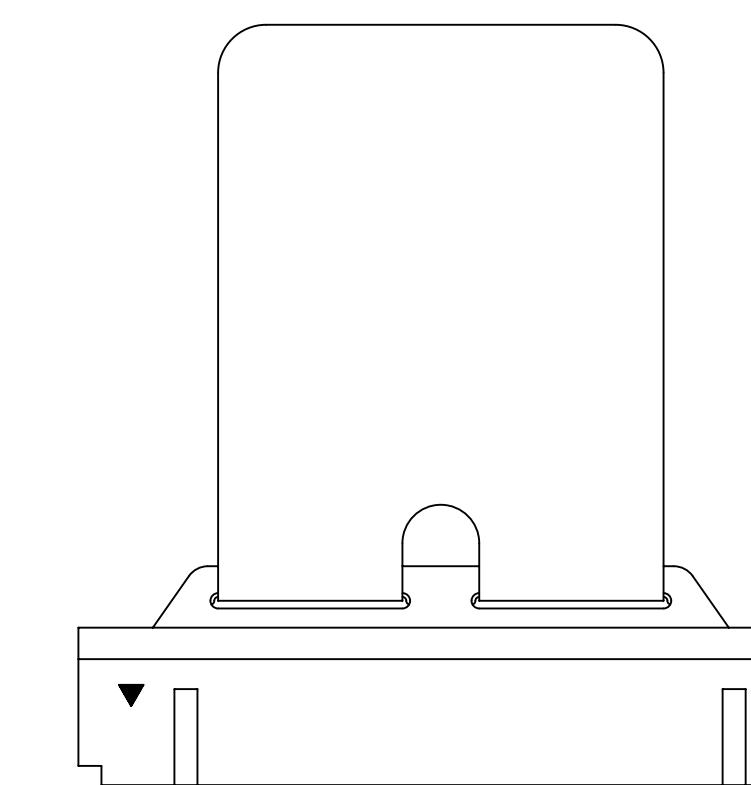
PULL TAB FEATURES
 VARY WITH CONNECTOR SIZE



VIEW SHOWN FOR
 REFERENCE ONLY



HIGH PROFILE SOCKET
 WITH PULL TAB



LOW PROFILE SOCKET
 WITH PULL TAB

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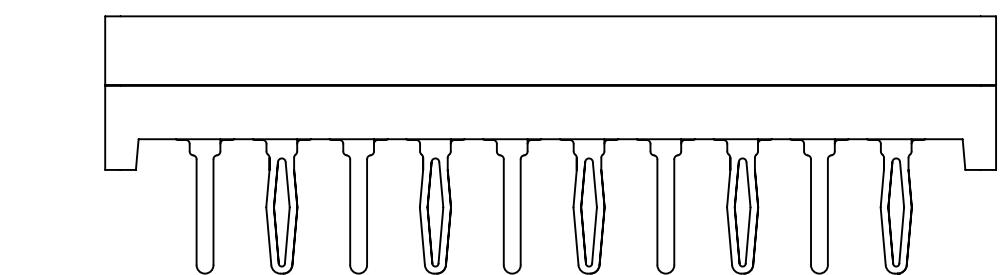
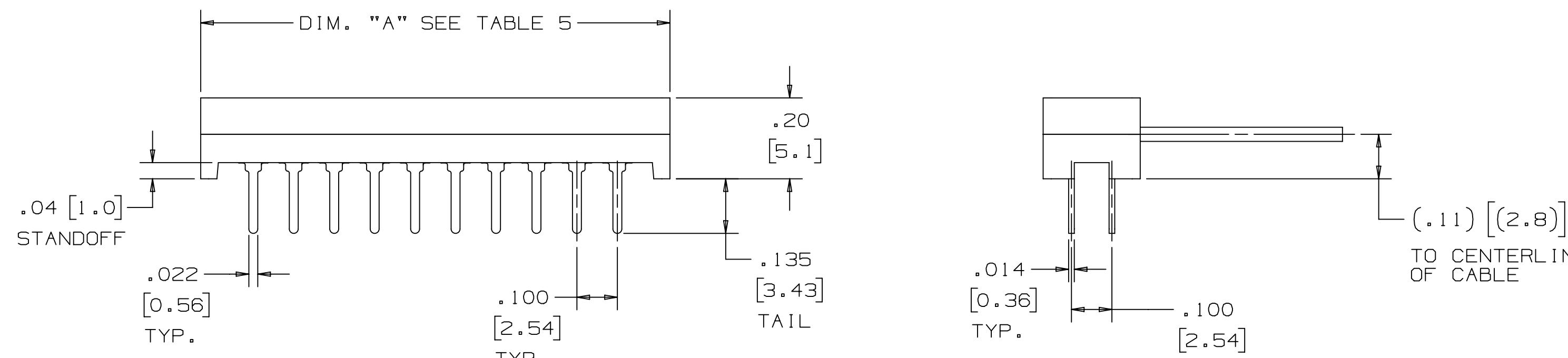
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B	108514	JAN 19,2023	JNC	JC
A	0104943	MAY 27,2022	LDS	JG
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DRFT L SCHMIDT		DATE MAY 04,2022	MFG	DATE
OK GOERTZ		DATE APR 29,2022	APPL	DATE
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DESIGN REFERENCE NEXT ASSEMBLY				
ACCESS CODES	DIVISION	DIVISION CODE		
DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED		
	4	INCHES		
	1	.0 .00 .000 .0000		
THIRD ANGLE PROJECTION				
INTERPRET PER ASME Y14.5 - 2018				
MAX SURFACE ROUGHNESS .0 .00 .000 .0000				
CAGE NUMBER D DRAWING NO. 78-5100-2754-9 REV. B				
MODEL 1M DET. LISTS YES NO SHT 3 OF 5				

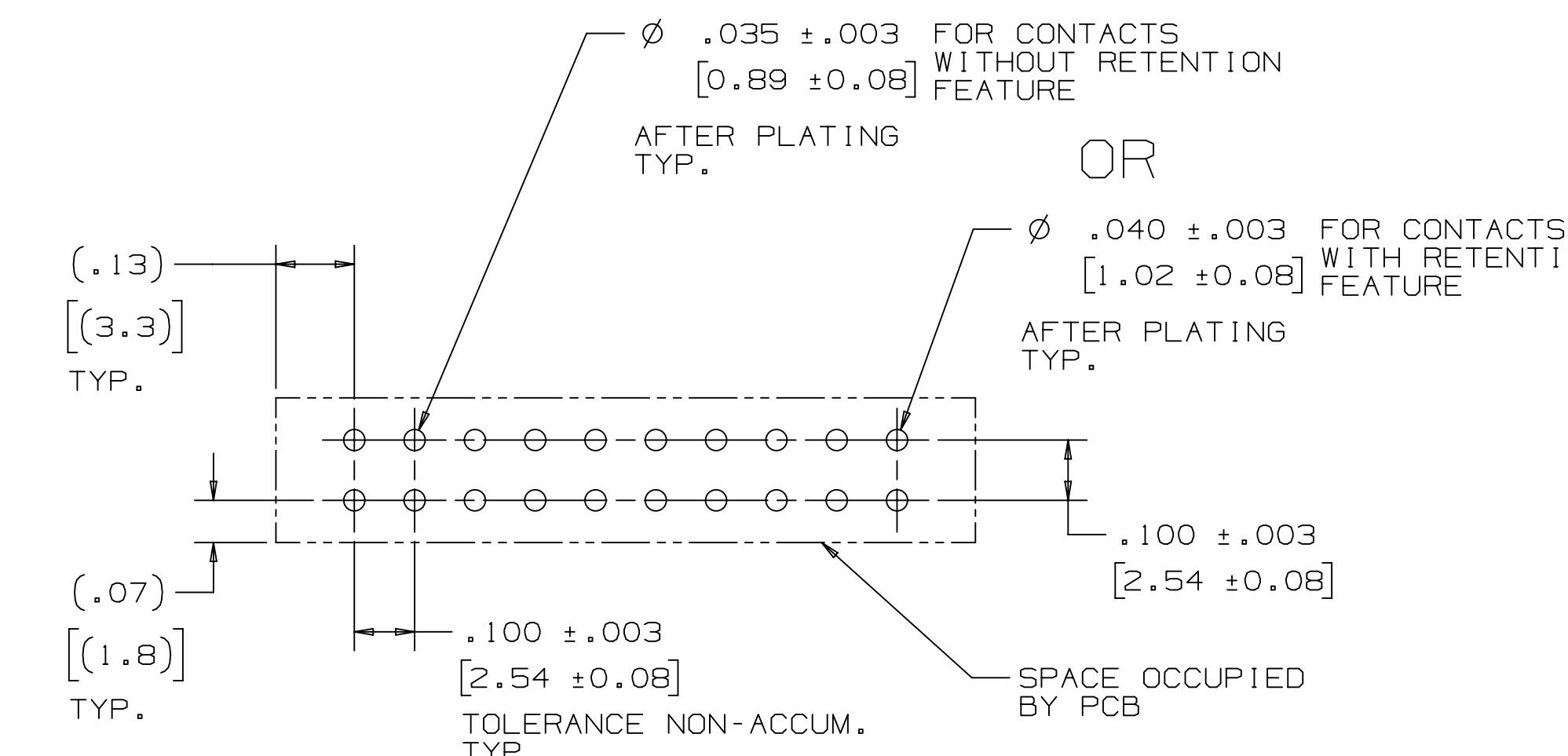
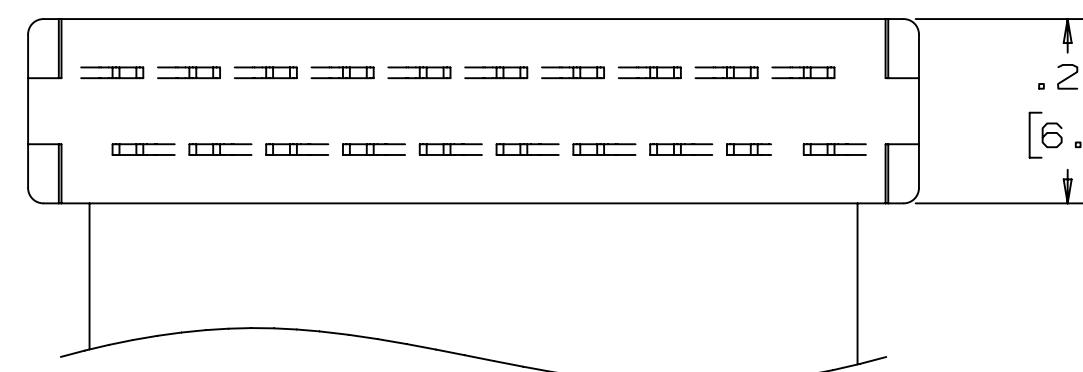
MOLDED CABLE ASSY
 .100 WITH SOCKET AND
 PCB CONNECTORS

8 7 6 5 4 3 2 1
 3M™ MOLDED ASSEMBLY, 1M SERIES
 .100" X .100" FOR .050" PITCH CABLE, CABLE ASSEMBLY CONNECTOR

D D
 3M™ MOLDED 2-ROW PCB CONNECTOR
 878 SERIES

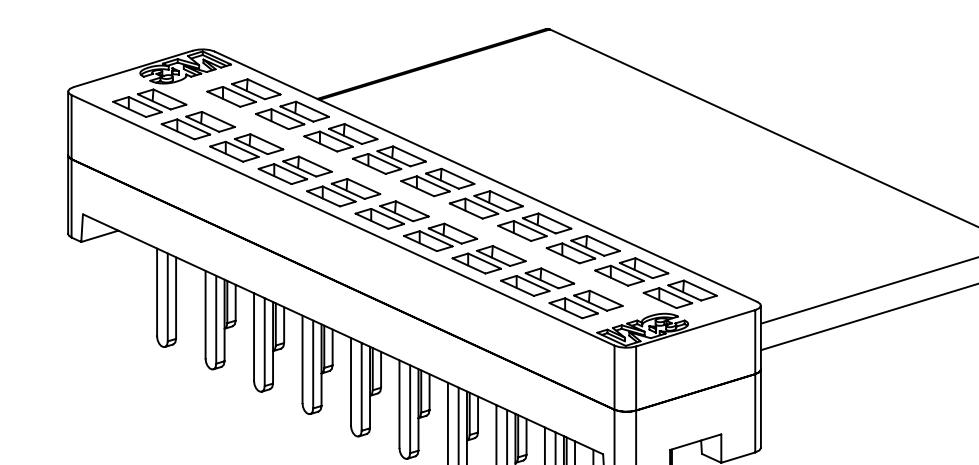


RETENTION CONTACTS ORIENTED AS SHOWN
 EVERY OTHER CONTACT WITH THE FIRST AND
 SECOND ROW ORDER SHIFTED BY ONE
 CONTACT. (ORIENTATION IS NOT BASED ON
 DELTA LOCATION AND MAY VARY FROM
 CONNECTOR TO CONNECTOR)



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

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]



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A	0104943	MAY 27,2022	LDS	JG
REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
DFT	L SCHMIDT	DATE 04.04.2022	MFG	DATE
O	KOERTZ	DATE APR 29, 2022	APPL	DATE
DESIGN REFERENCE	NEXT ASSEMBLY			
ACCESS CODES	DIVISION CODE			
DO NOT SCALE DRAWING	SCALE 4	TOLERANCES EXCEPT AS NOTED		
	1	INCHES		
		.0 ± .1		
		.000 ± .01		
		.000 ± .005		
		.0000 ± .0002		
THIRD ANGLE PROJECTION		MILLIMETERS		
INTERPRET PER ASME Y14.5 - 2018		.0 ±		
MAX SURFACE ROUGHNESS		.000 ±		
DETAILED SURFACES		.000 ±		
MARKED ONLY		.000 ±		
ANGLE 45°		ANGLES 45°		
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D	1M	78-5100-2754-9	B	
DET. LISTS	YES	NO	SHT 4 OF 5	

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MOLDED CABLE ASSY
 .100 WITH SOCKET AND
 PCB CONNECTORS

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

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DESIGN REFERENCE		NEXT ASSEMBLY		B	108514	JAN 19, 2023 REVISED AND REDRAWN		JNC	JC
				A	0104943	MAY 27, 2022 PRODUCTION RELEASE		LDS	JG
ACCESS CODES				REV	ECO	ISSUE DATE AND DESCRIPTION		DRFT	CHKD
				DRFT L SCHMIDT		DATE MAR 04, 2022	MFG	DATE	
				CHKD J GOERTZ		DATE APR 29, 2022	APPVL	DATE	
DIVISION		DIVISION CODE		 3M Center St. Paul, MN 55144		© 3M COPYRIGHT 2023 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 1 1	TOLERANCES EXCEPT AS NOTED		INCHES		TITLE MOLDED CABLE ASSY 100 WITH SOCKET AND PCB CONNECTORS			
 THIRD ANGLE PROJECTION		.0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002		MILLIMETERS 0 ± .0 ± .00 ± .000 ±					
INTERPRET PER ASME Y14.5 - 2018				CAGE NUMBER	SIZE	DRAWING NO.		REV.	
MAX SURFACE ROUGHNESS		<input checked="" type="checkbox"/> ALL SURFACES <input type="checkbox"/> MARKED ONLY		D	78-5100-2754-9		B		
				MODEL	1M	DET. LISTS		YES <input checked="" type="checkbox"/> NO	SHT 5 OF 5