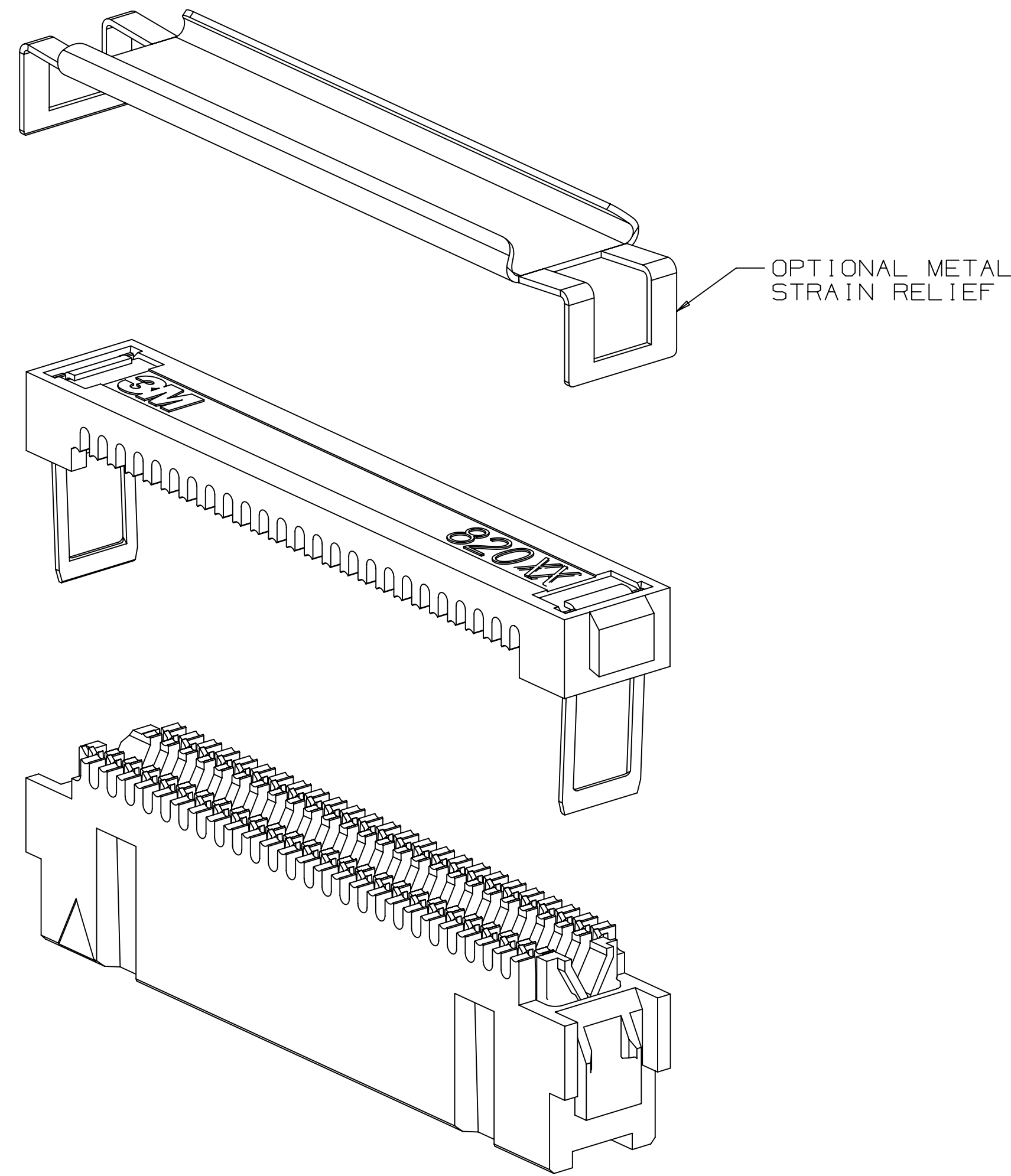


3M™ TRIPOLARIZED WIREMOUNT SOCKET, 820 SERIES  
 .050" X .100" FOR .025" PITCH CABLE



- \* TRIPOLARIZED FOR ROBUST ALIGNMENT WHEN MATING TO 3M™ 810 SERIES HEADER.
- \* .050" X .100" HALVES THE CONNECTOR LENGTH VS. TRADITIONAL .100" X .100" PRODUCTS.
- \* HILL-N-DALE DESIGN PROVIDES A HIGH PERFORMANCE IDC TERMINATION AND IMPROVED SIGNAL INTEGRITY VS. PLANAR TERMINATED CONNECTORS.
- \* BERYLLIUM COPPER ALLOY CONTACTS FOR SUPERIOR STRENGTH AND RELIABILITY.
- \* METAL COVER LATCH FOR POSITIVE COVER RETENTION AND LONG TERM RELIABILITY.
- \* METAL STRAIN RELIEF FOR INCREASED RELIABILITY AND DURABILITY.

- NOTES
1. REGULATORY INFORMATION: VISIT 3M.com/regs
  2. UNLESS OTHERWISE NOTED, REFERENCES TO INDUSTRY SPECIFICATIONS ARE INTENDED TO INDICATE SUBSTANTIAL COMPLIANCE TO THE MATERIAL ELEMENTS OF THE SPECIFICATION. SUCH REFERENCES SHOULD NOT BE CONSTRUED AS A GUARANTEE OF COMPLIANCE TO ALL REQUIREMENTS IN A GIVEN SPECIFICATION.
  3. THIS POLARIZING SLOT DOES NOT EXIST ON THE 20 POSITION SOCKET.
  4. RECOMMENDED TO BE MATED TO THE .050" X .100" 3M™ 810XX SERIES HEADERS, TS-0253.

2 PHYSICAL :

INSULATION: MATERIAL: GLASS FILLED POLYESTER (PBT)  
 FLAMMABILITY: UL94V-0  
 COLOR: GRAY  
 CONTACT: MATERIAL: BERYLLIUM COPPER ALLOY  
 PLATING: UNDER PLATING: 50µ"-150µ" [ 1.27µm-3.81µm ] NICKEL-OVERALL  
 U-SLOT: 100µ"-300µ" [ 2.54µm-7.62µm ] MATTE TIN  
 WIPING AREA: 30µ" [ 0.76µm ] GOLD AVG.  
 WIRE ACCOMMODATION: 30 AWG SOLID, 30 AWG PLEATED FOIL AND 30 AWG STRANDED, PVC, TPE, FEP.  
 MARKINGS: 3M LOGO AND ORIENTATION TRIANGLE

2 ELECTRICAL :

CURRENT RATING: 3.00 A, 1 CONTACT POWERED  
 2.00 A, 4 CONTACTS POWERED  
 0.75 A, ALL CONTACTS POWERED

RATING CONDITIONS: EIA-364-070 METHOD 2, 30°C MAXIMUM TEMPERATURE RISE, 20% DERATED. REFERENCE APPROPRIATE 3M PRODUCT SPECIFICATION FOR DETAILED CURRENT DERATING CURVES.

INSULATION RESISTANCE: >1 X 10<sup>9</sup>Ω AT 500 V<sub>DC</sub>  
 WITHSTANDING VOLTAGE: 500V<sub>RMS</sub> AT SEA LEVEL

2 ENVIRONMENTAL :

TEMPERATURE RATING: -55°C TO +105°C

ORDERING INFORMATION  
 SOCKETS

82XXX-600X-RB

CONTACT QUANTITY  
 (SEE TABLE 1)

STRAIN RELIEF:  
 0 = NO STRAIN RELIEF  
 6 = WITH STRAIN RELIEF

NOTE:  
 APPLICATION TOOLS: 3M™ PRESS (OR EQUIVALENT),  
 3M™ LOCATOR PLATE 3443-113, 3M™ PLATTEN 3442-45.

ORDERING INFORMATION  
 STRAIN RELIEF

(IF ORDERED SEPARATELY)

3858-XXX

CONTACT QUANTITY  
 (SEE TABLE 1)

NOTE:  
 THE STRAIN RELIEF BY ITSELF  
 IS NOT UL CERTIFIED.

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3M logo and text: 3M logo, UL logo, UL FILE NO: E68080

DIMENSIONS: INCHES [ MM ]  
 [ MM ] IS REF. ONLY

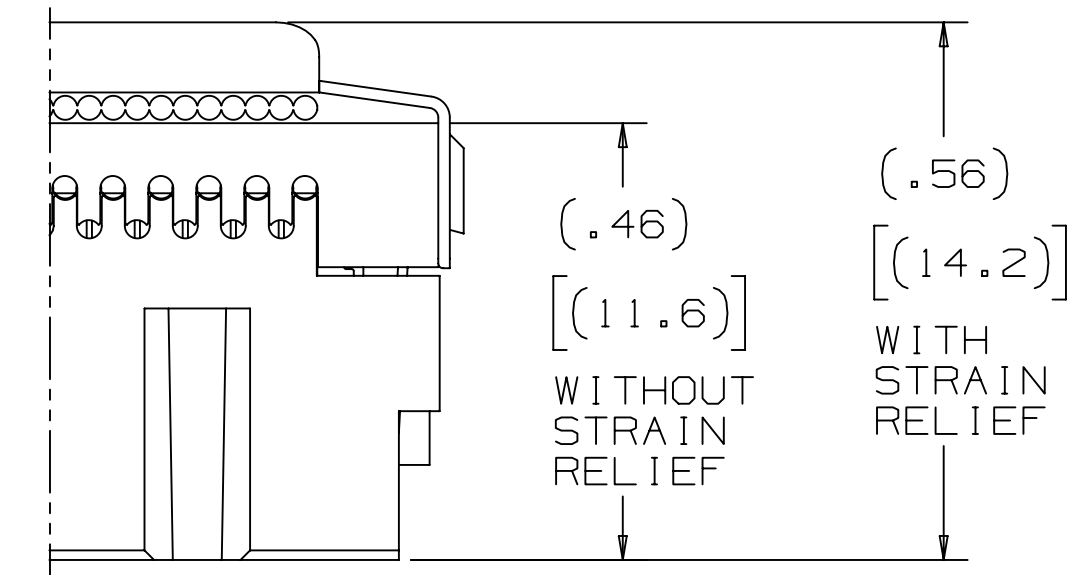
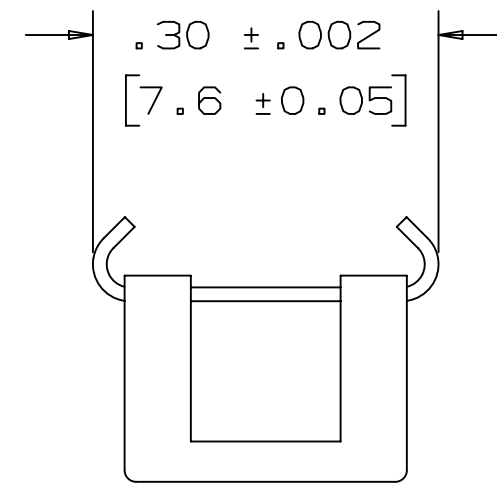
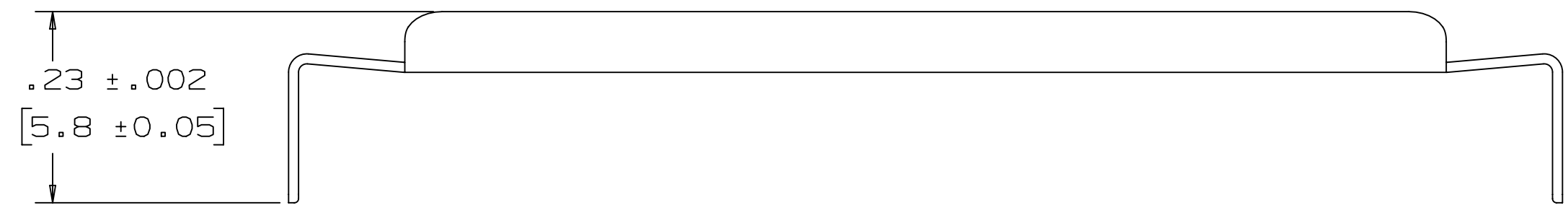
DESIGN REFERENCE	NEXT ASSEMBLY
DO NOT SCALE DRAWING	SCALE
THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018
MAX SURFACE ROUGHNESS	ALL SURFACES
MARKED ONLY	ANGLES
TOLERANCES EXCEPT AS NOTED	INCHES .0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002
MILLIMETERS	0 ± .0 ± .00 ± .000 ±

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
109055		FEB 23, 2023 REVISE 26P DIM B	JNC	FJR
101675		JAN 10, 2022 REVISED AND REDRAWN	JNC	SAN
DRFT	CASTIGLIONE	DATE	DATE	DATE
CHKD		DATE	DATE	DATE
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TITLE: TRIPOLARIZED WIREMOUNT SOCKET, .050 X .100				
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D	B20	78-5100-0254-2	F	
MODEL	B20	DET	LISTS	YES <input type="checkbox"/> NO <input type="checkbox"/>
SHT 1 OF 3				

78-5100-0254-2  
DRAWING NUMBER

A

3M™ TRIPOLARIZED WIREMOUNT SOCKET, 820 SERIES  
 .050" X .100" FOR .025" PITCH CABLE



ASSEMBLED HEIGHT

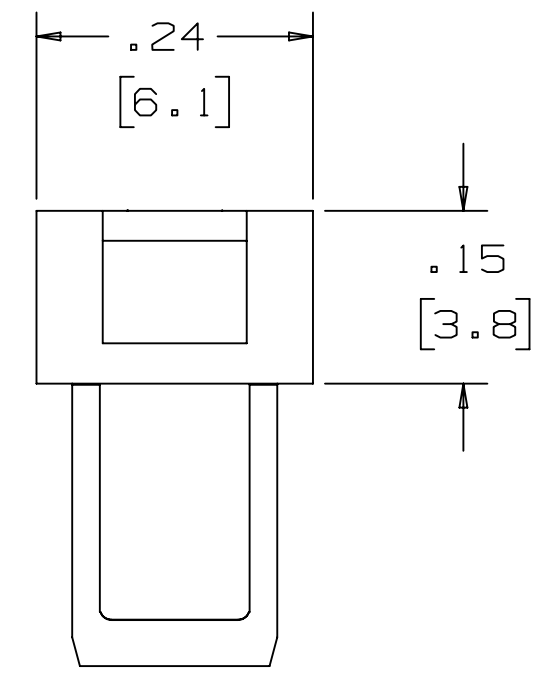
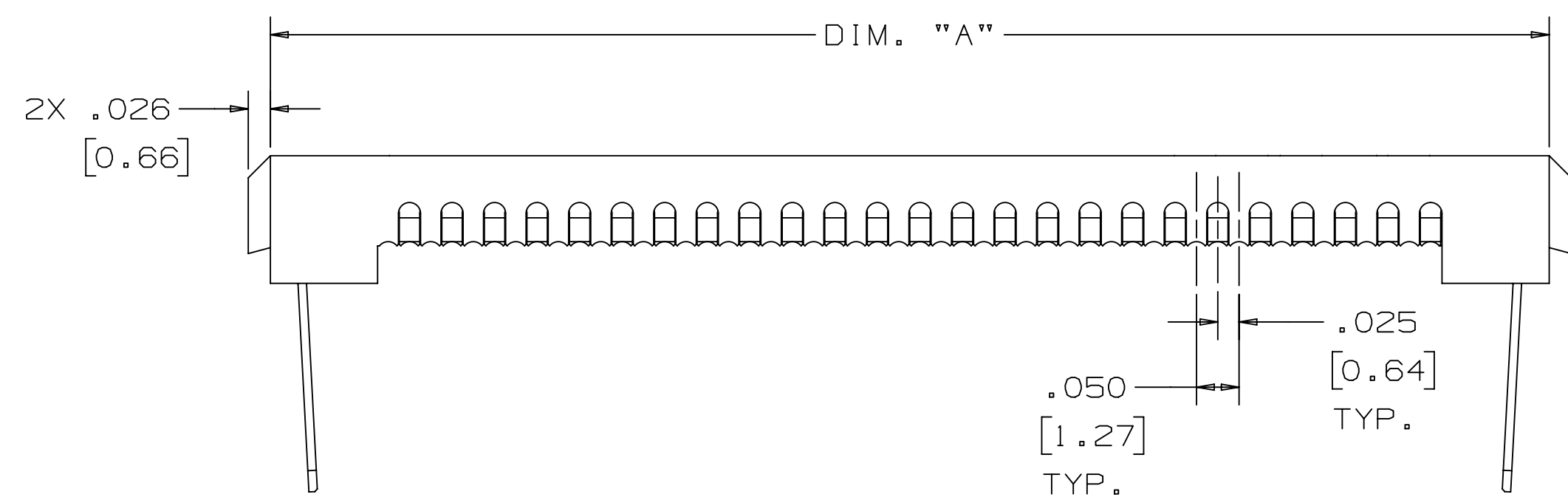
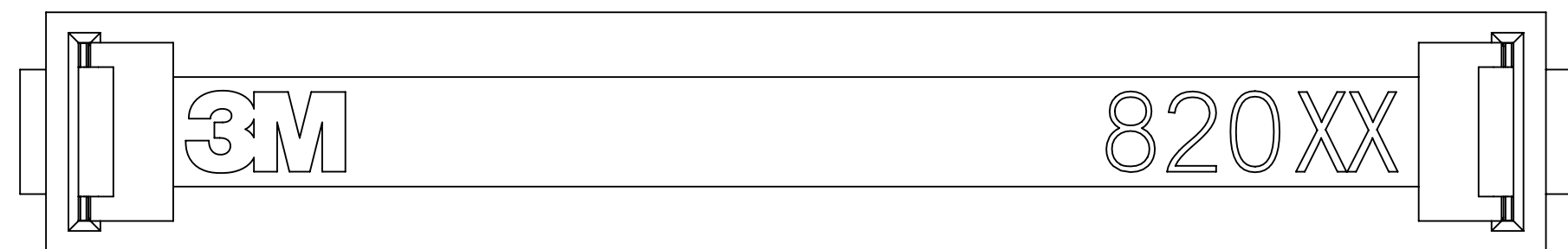
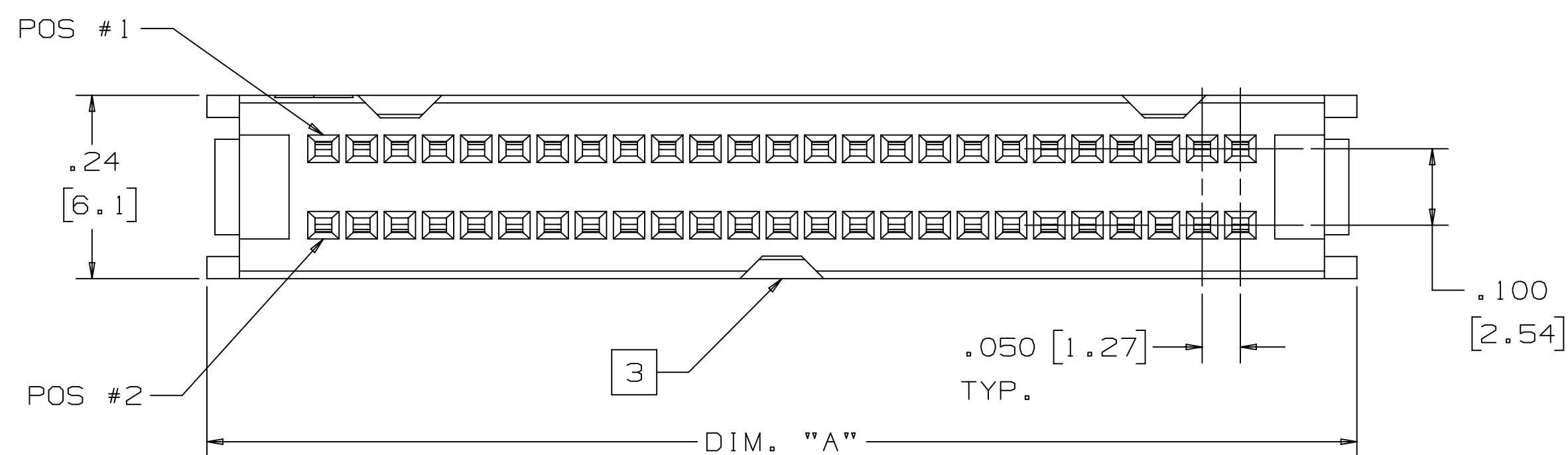
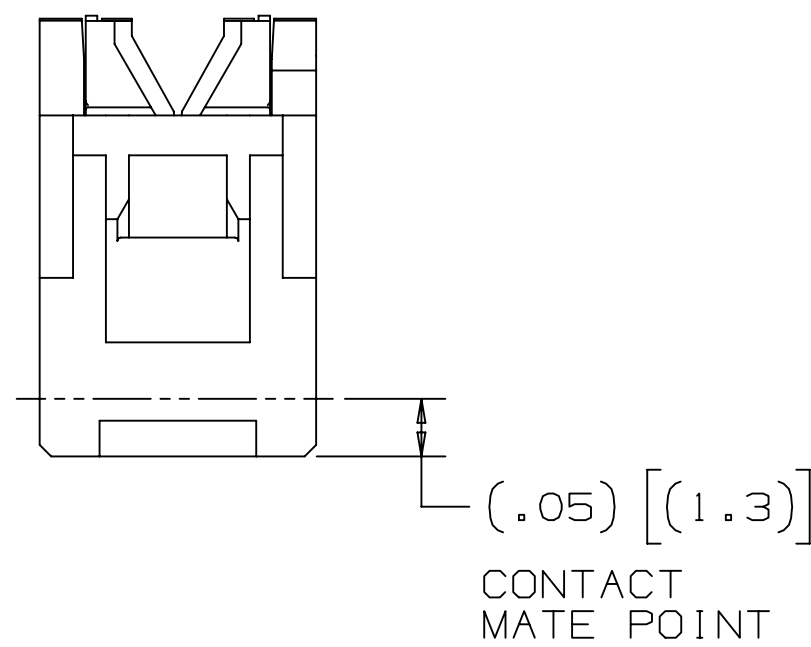
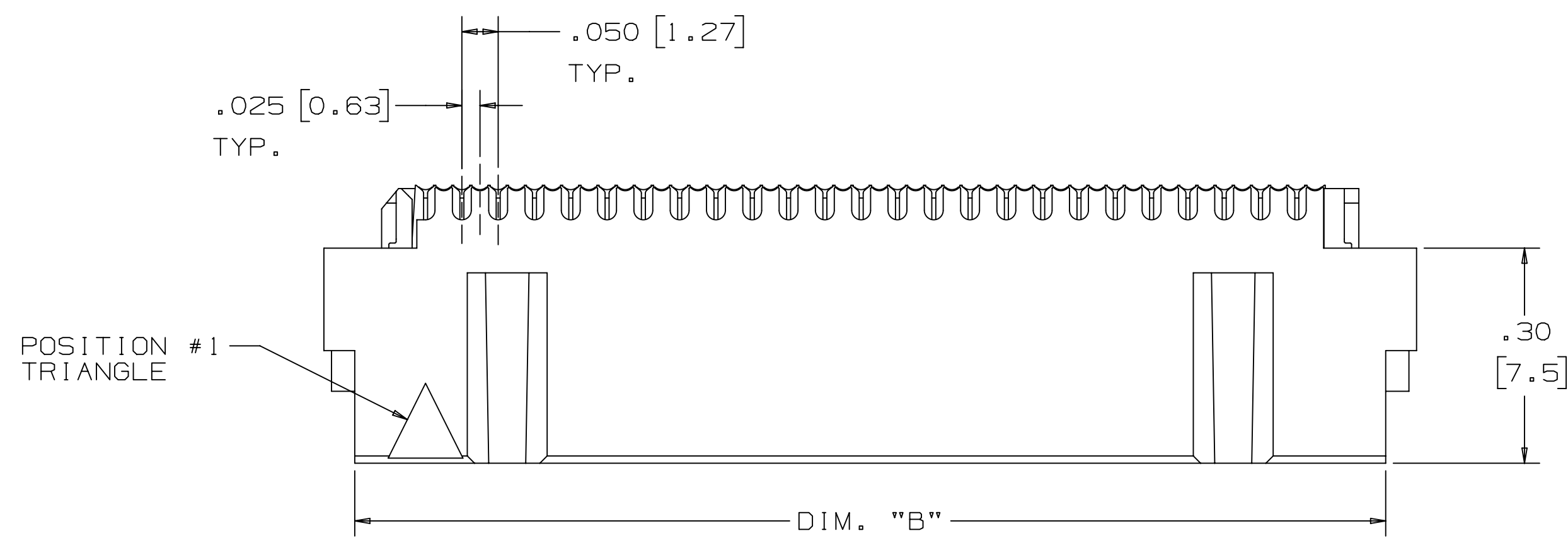


TABLE 1		
CONTACT QTY	DIM. "A"	DIM. "B"
020	.755 [19.18]	.670 [17.02]
026	.905 [22.99]	.820 [20.83]
036	1.155 [29.34]	1.070 [27.18]
040	1.255 [31.88]	1.170 [29.72]
050	1.505 [38.23]	1.420 [36.07]
060	1.755 [44.58]	1.670 [42.42]
068	1.955 [49.66]	1.870 [47.50]
080	2.255 [57.28]	2.170 [55.12]
100	2.755 [69.98]	2.670 [67.82]



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DESIGN REFERENCE	NEXT ASSEMBLY	REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
		DRFT	CASTIGLIONE	DATE	DATE	DATE
		CHKD		DATE	DATE	DATE
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DO NOT SCALE DRAWING	SCALE	TOLERANCES EXCEPT AS NOTED INCHES .0 ± .1 .00 ± .01 .000 ± .005 .0000 ± .0002				
THIRD ANGLE PROJECTION		MILLIMETERS 0 ± .0 ± .00 ± .000 ±				
MAX SURFACE ROUGHNESS		INTERPRET PER ASME Y14.5 - 2018 ALL SURFACES MARKED ONLY				
		TITLE TRIPOLARIZED WIREMOUNT SOCKET, .050 X .100			CAGE NUMBER D78-5100-0254-2	
		MODEL B20			REV. NUMBER F	
		DET [ ] YES [X] NO			SHT 2 OF 3	

DRAWING NUMBER 78-5100-0254-2

REVISION F

# 3M™ TRIPOLARIZED WIREMOUNT SOCKET, 820 SERIES

.050" X .100" FOR .025" PITCH CABLE

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		DRFT	CASTIGLIONE	DATE	JAN 10, 2022	MFG
		CHKD		DATE	JAN 10, 2022	APPV
				DATE	JAN 10, 2022	ST. NEU
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THIRD ANGLE PROJECTION	INTERPRET PER ASME Y14.5 - 2018	TITLE TRIPOLARIZED WIREMOUNT SOCKET, .050 X .100				
MAX SURFACE ROUGHNESS	ALL SURFACES	CAGE NUMBER	SIZE	DRAWING NO.	REV.	
<input checked="" type="checkbox"/> MARKED ONLY	ANGLES ±	D	820	78-5100-0254-2	F	
		MODEL	B20	DET	LISTS	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> SHT 3 OF 3

78-5100-0254-2 Revision