

3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES

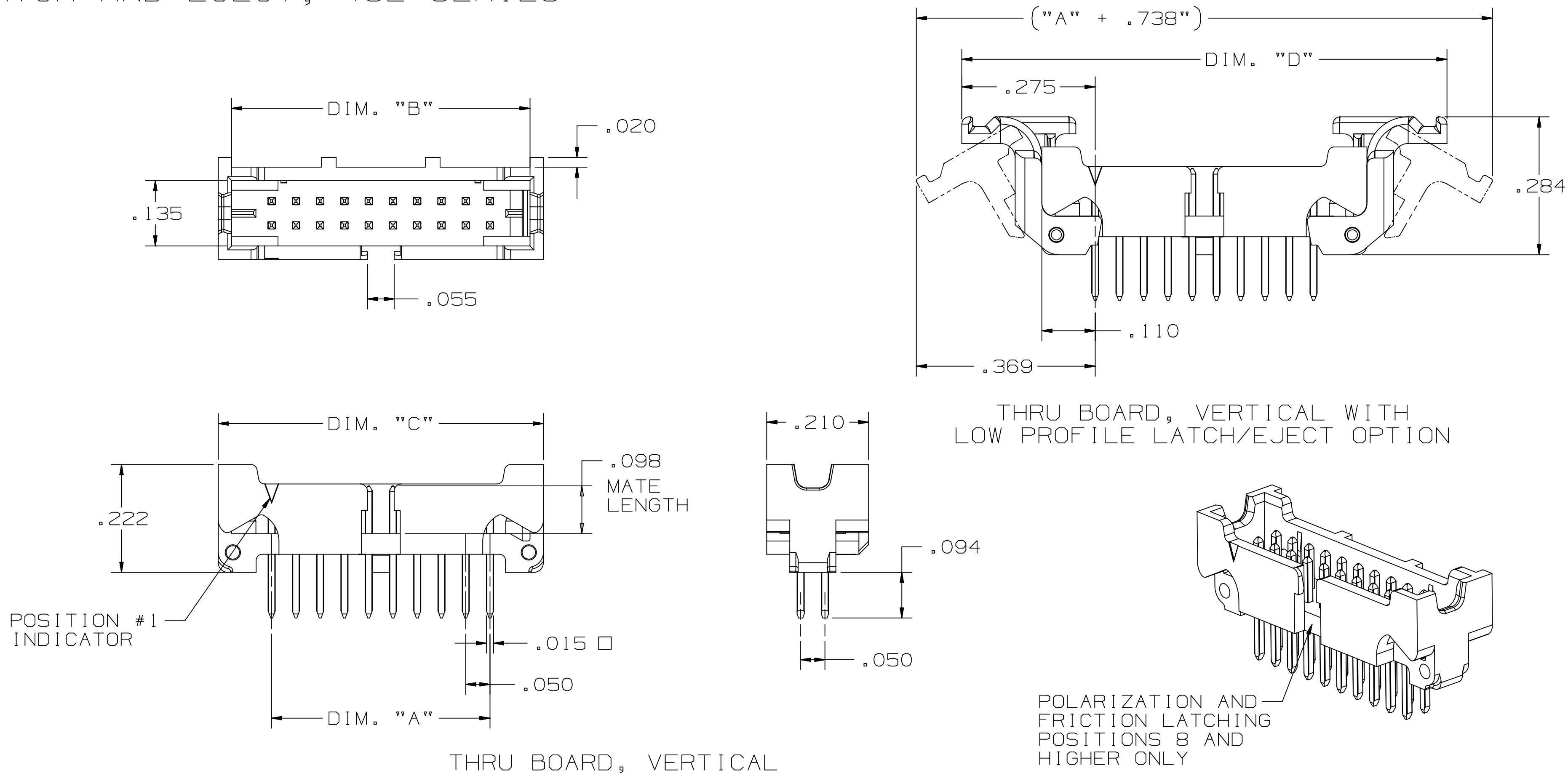
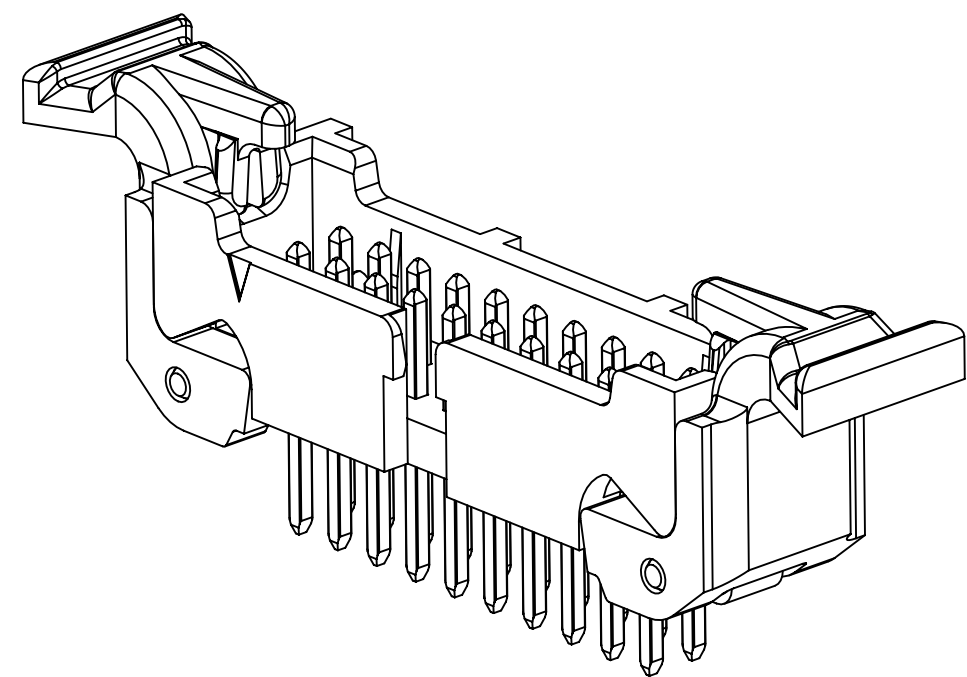
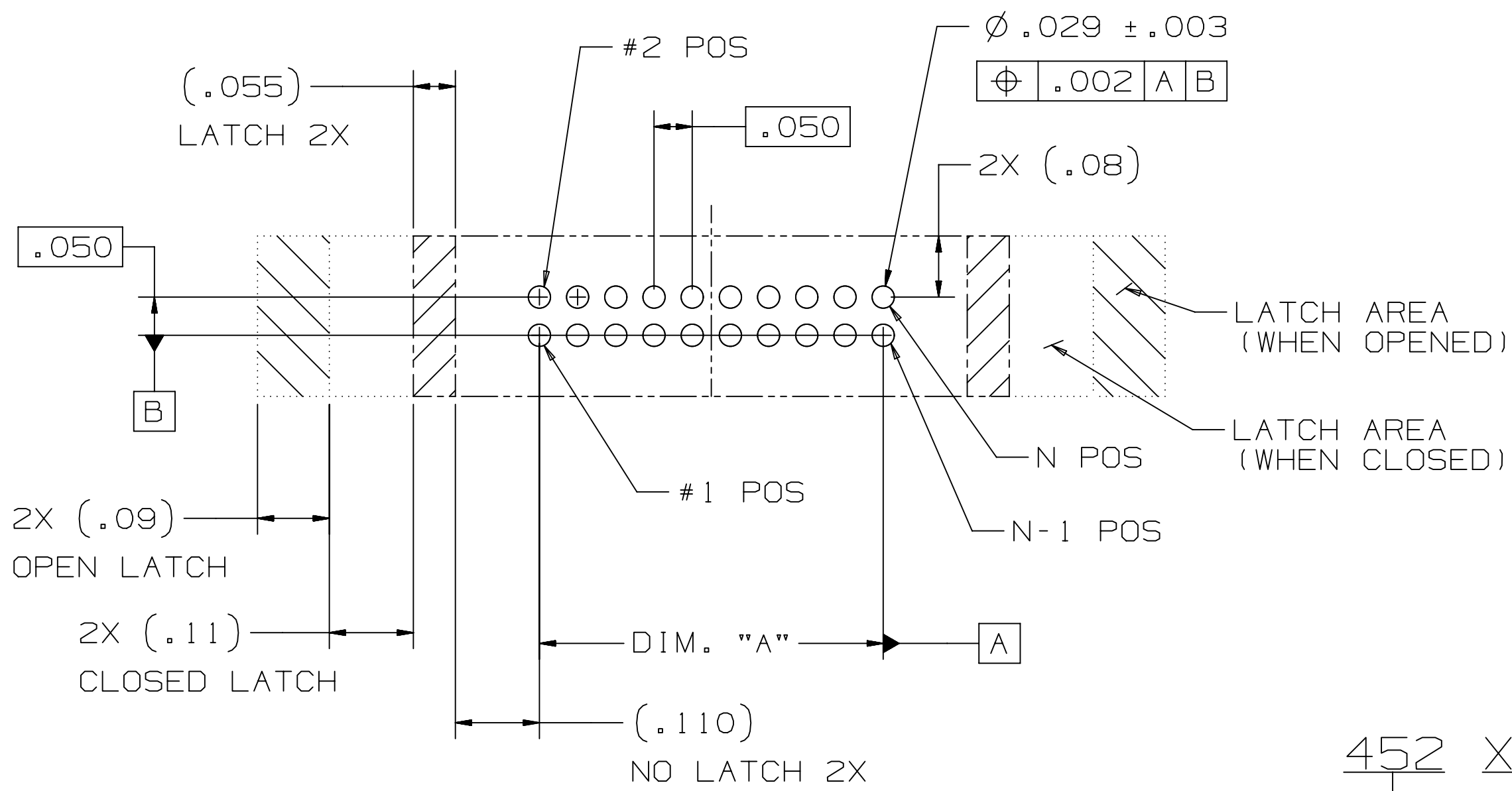


TABLE 1: VERTICAL THRU				
No. of Positions	Dim "A"	Dim "B"	Dim "C"	Dim "D"
4	.050	.215	.270	.600
6	.100	.265	.320	.650
8	.150	.315	.370	.700
10	.200	.365	.420	.750
12	.250	.415	.470	.800
14	.300	.465	.520	.850
16	.350	.515	.570	.900
20	.450	.615	.670	1.000
26	.600	.765	.820	1.150
30	.700	.865	.920	1.250
40	.950	1.115	1.170	1.500
50	1.200	1.365	1.420	1.750



WITH LATCH/EJECT

- NOTES
1. MATERIAL: BODY: LCP, UL94V-0 LATCH: PPA, UL94V-0 CONTACTS: COPPER ALLOY.
 2. PLATING: 50-150µ" NICKEL UNDERPLATE 30 = 30µ" GOLD MIN. ON WIPING AREA WITH 200µ" MATTE TIN ON SOLDER TAIL 00 = GOLD FLASH ON WIPING AREA WITH 100-140µ" MATTE TIN ON SOLDER TAIL.
 3. MATING COMPATIBILITY: 3M 1.27mm (0.050"), 451 SERIES RIBBON CABLE SOCKET. TECH SHEETS TS-2436 AND TS-2396
 4. REGULATORY INFORMATION: VISIT 3M.com/regs
 5. IN THE EVENT OF CONFLICT BETWEEN THIS DATA AND THAT CONTAINED IN THE PRODUCT SPECIFICATION, THE PRODUCT SPECIFICATION TAKES PRECEDENT.
 6. REFERENCE PRODUCT SPEC: 3M DOC ID# 78-5102-0091-4
 7. OTHER PIN COUNTS AVAILABLE UPON REQUEST. CONTACT 3M.
 8. 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.
 9. PACKAGING: VERTICAL THRU: TRAY RIGHT ANGLE THRU: TRAY VERTICAL SMT: TAPE AND REEL.



RECOMMENDED BOARD LAYOUT

452 XX - X X 0 2 XX
SERIES
No. OF POSITIONS SEE TABLE 1
PLATING
00 = AU FLASH
30 = 30µ" GOLD
CONTACT TAIL
2 = STANDARD (.094")

PART CONFIG. AND PACKAGING
6 = VERTICAL THRU HOLE, TRAY PACKAGING
5 = RIGHT ANGLE THRU HOLE, TRAY PACKAGING
2 = VERTICAL SMT, TAPE AND REEL WITH VAC CAP
LATCH/EJECT
0 = NO LATCHES
2 = WITH LOW PROFILE LATCHES

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

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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 _{AC}
INSULATION RESISTANCE:	> 1 × 10 ⁹ Ohms AT 500 VDC
WITHSTANDING VOLTAGE:	1250V _{DC} AT SEA LEVEL
OPERATING TEMPERATURE:	-65°C to +125°C
UL & CUL OPERATING TEMPERATURE:	+130°C
PROCESSING TEMPERATURE:	260°C
LEAD-FREE SOLDERABLE:	YES
MOISTURE SENSITIVITY LEVEL:	MSL1 PER J-STD-020

78-5100-2436-3
78-5100-2396-9

DESIGN REFERENCE NEXT ASSEMBLY

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX. SURFACE ROUGHNESS

ALL SURFACES

MARKED ONLY

J	105041	MAY 26, 2022	JNC	SAN
H	100200	OCT 19, 2021	JNC	SAN
G	92270	AUG 18, 2020	JNC	SAN
F	56988	SEP 24, 2014	JNC	SN
E	54514	JUN 19, 2014	SJS	SAN
D	51884	JAN 08, 2014	SJS	SAN
C	50290	OCT 08, 2013	JNC	SN
B	48635	JUL 12, 2013	JNC	SN
A	46797	MAR 25, 2013	JNC	SAN

REV	ECO	ISSUE DATE AND DESCRIPTION	DRFT	CHKD
1		NOV 29, 2012	PRC	NOV 29, 2012
2		NOV 29, 2012	PRC	NOV 29, 2012

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TITLE
SHROUDED BMT HEADER,
.05 X .05 PITCH, L/E,
452 SERIES

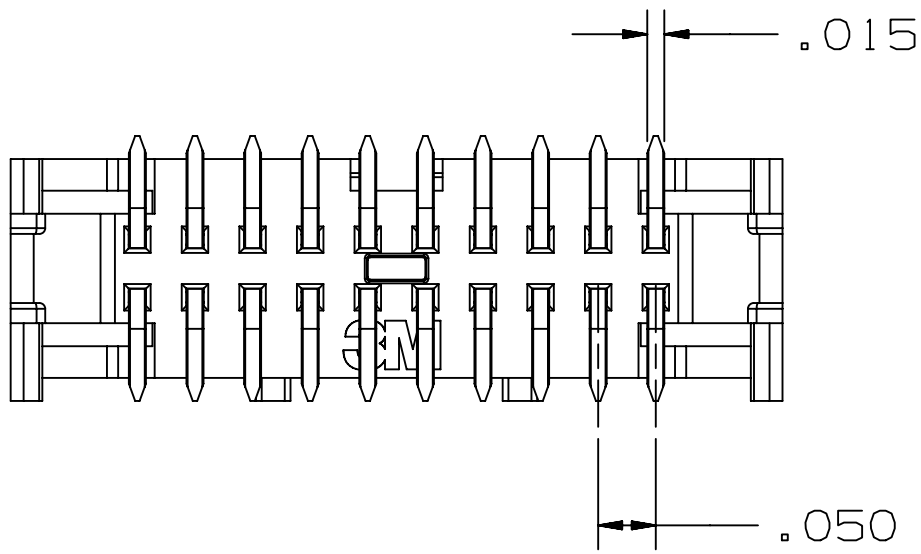
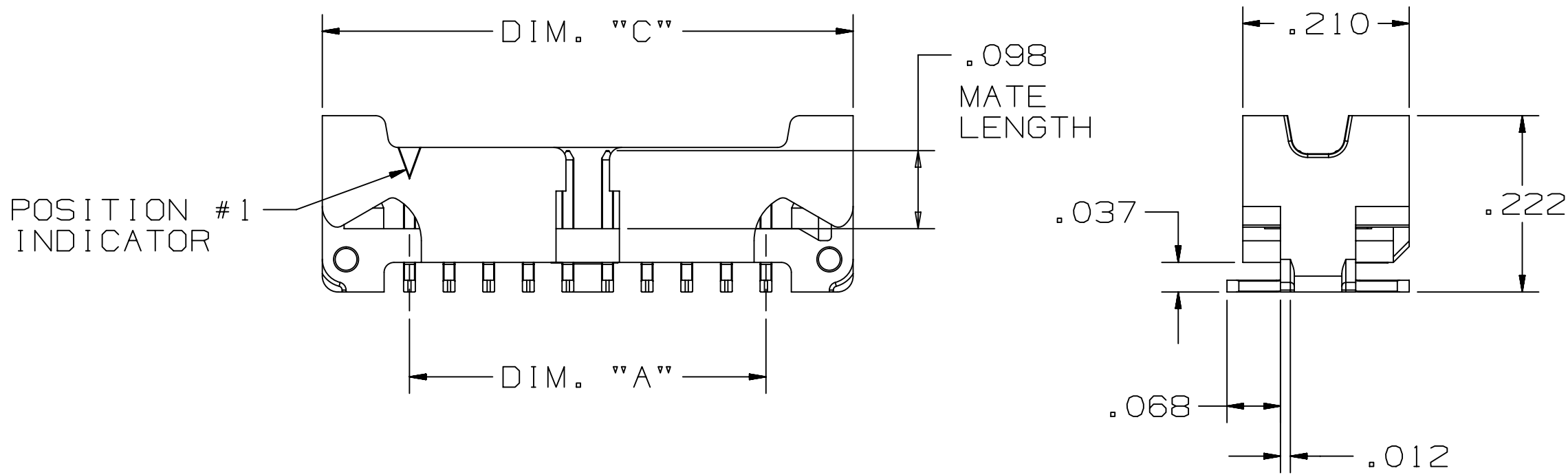
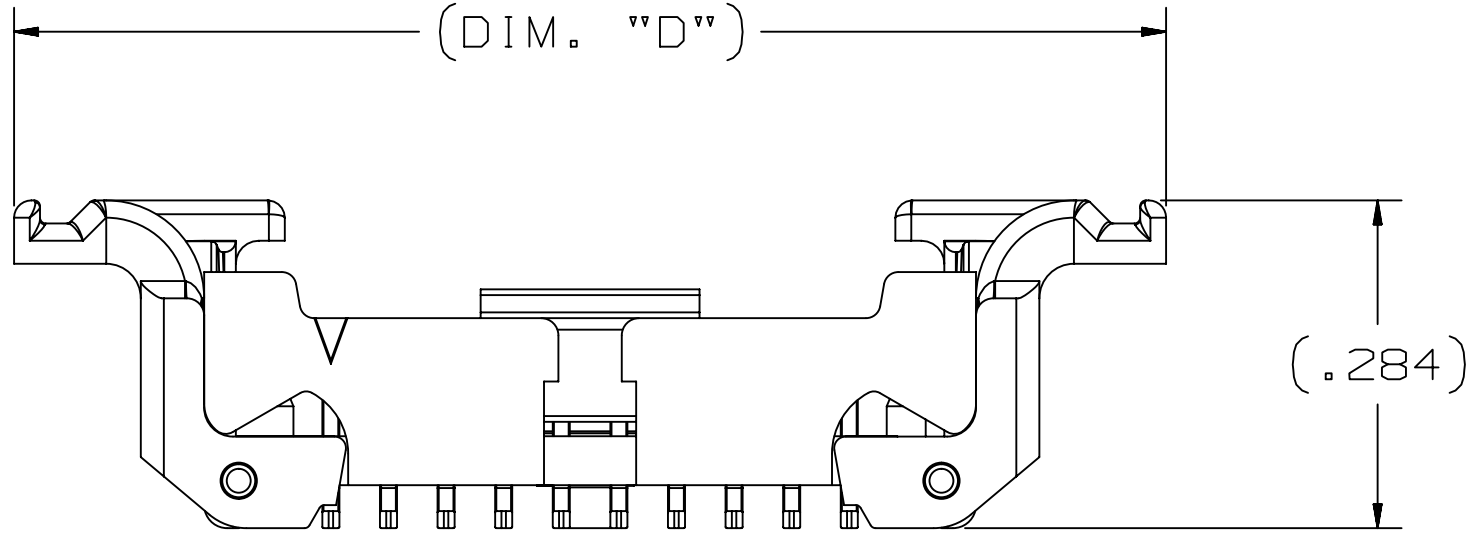
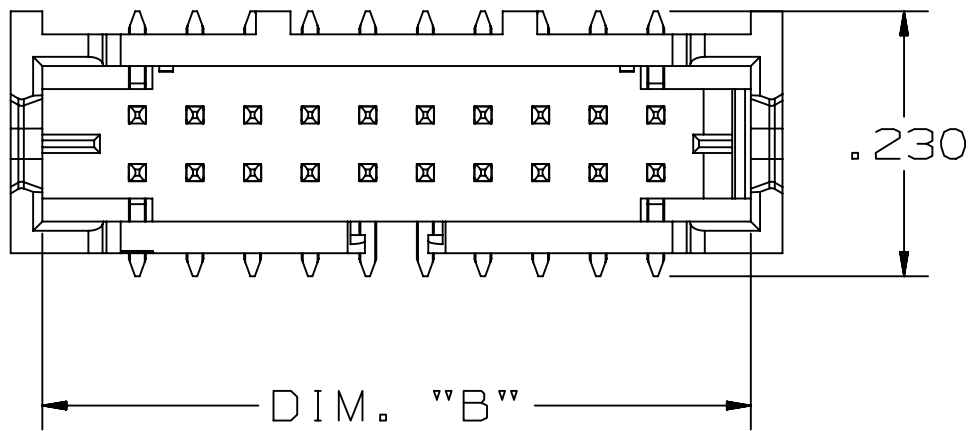
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D78-5100-2437-1

MODEL
452

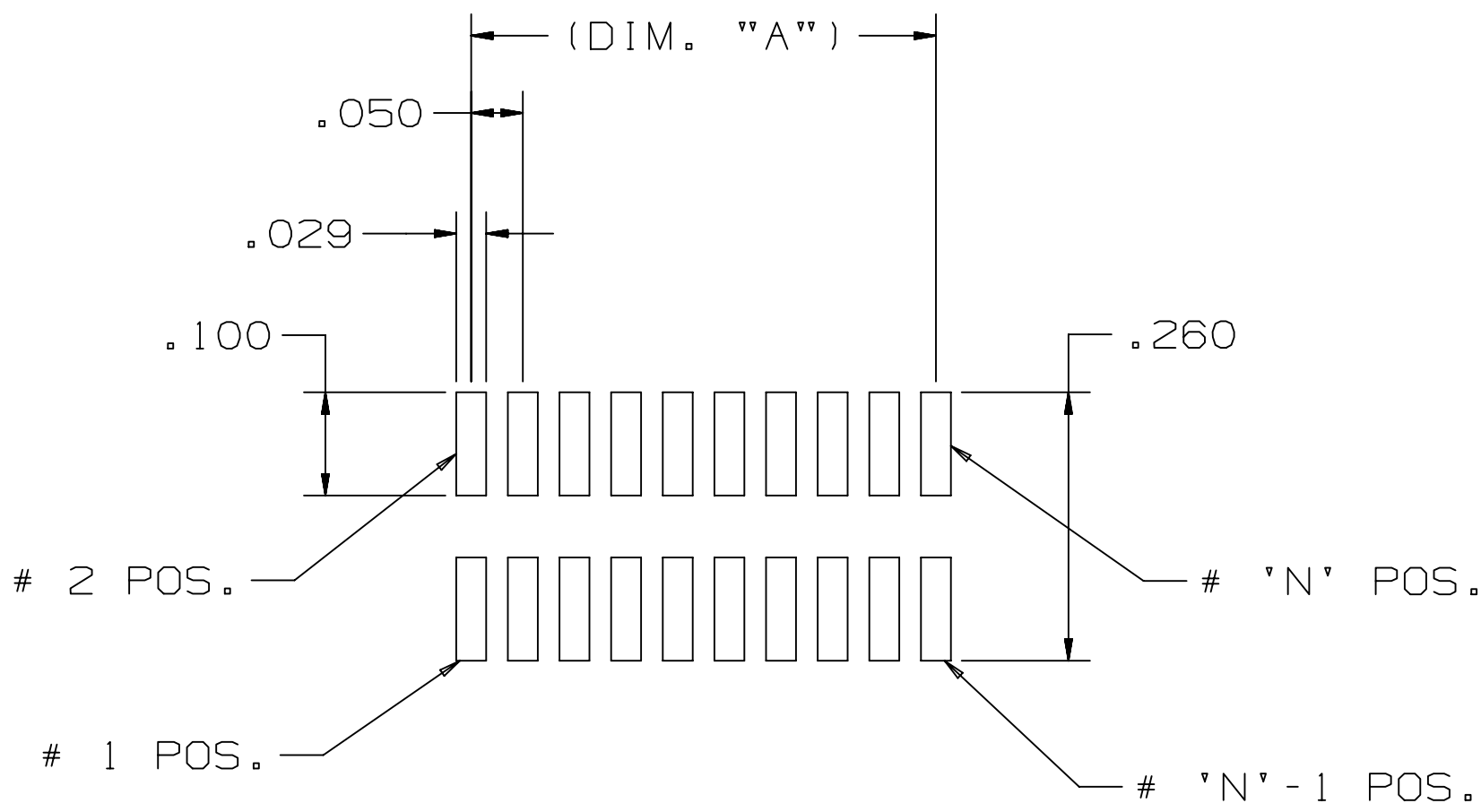
LISTS YES NO SHT 1 OF 5

UL FILE NO: E68080

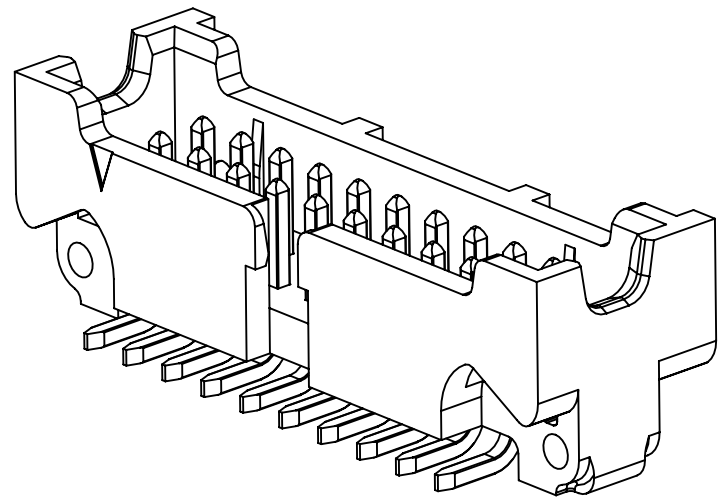
3M™ SHROUDED BOARDMOUNT HEADER, 1.27mm (0.050") PITCH
LATCH AND EJECT, 452 SERIES



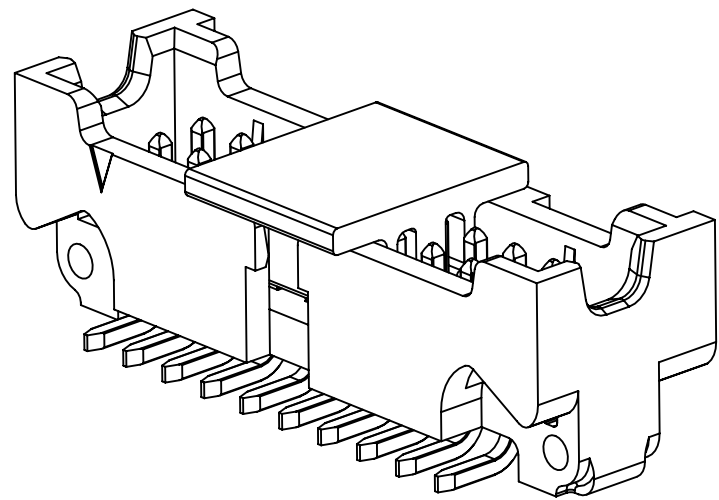
SURFACE MOUNT, VERTICAL



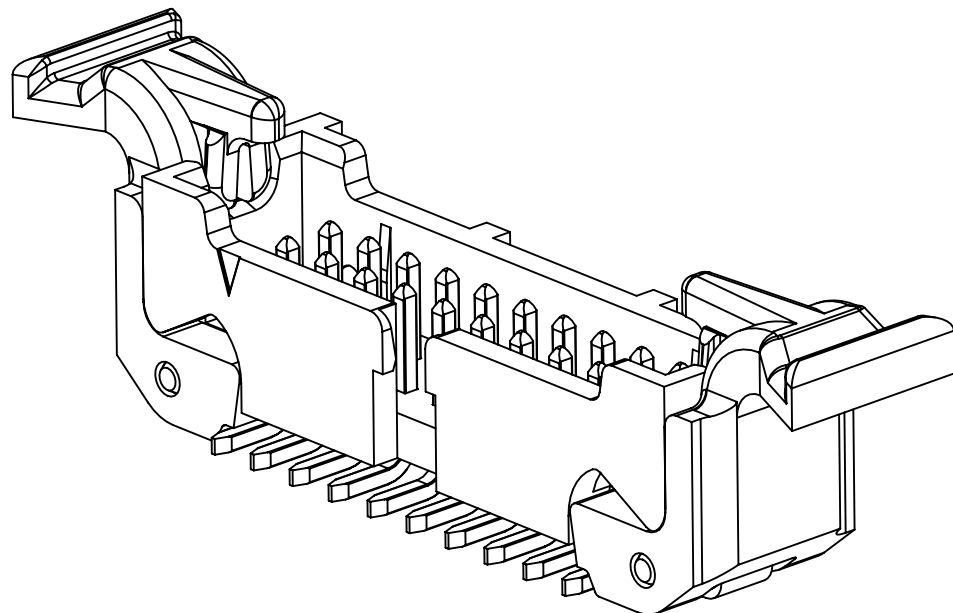
RECOMMENDED BOARD LAYOUT



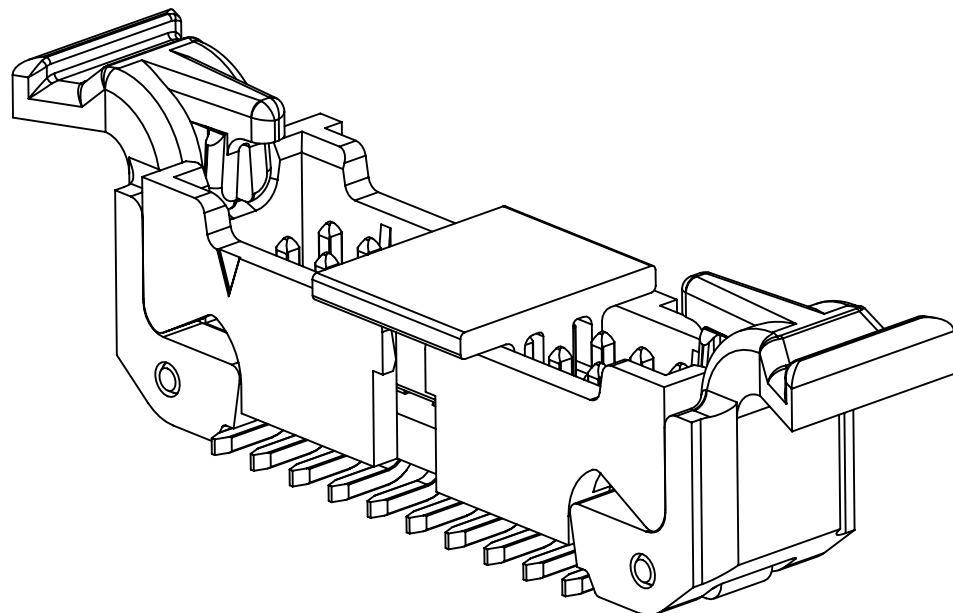
SHROUDED SMT HEADER



WITH VACUUM CAP



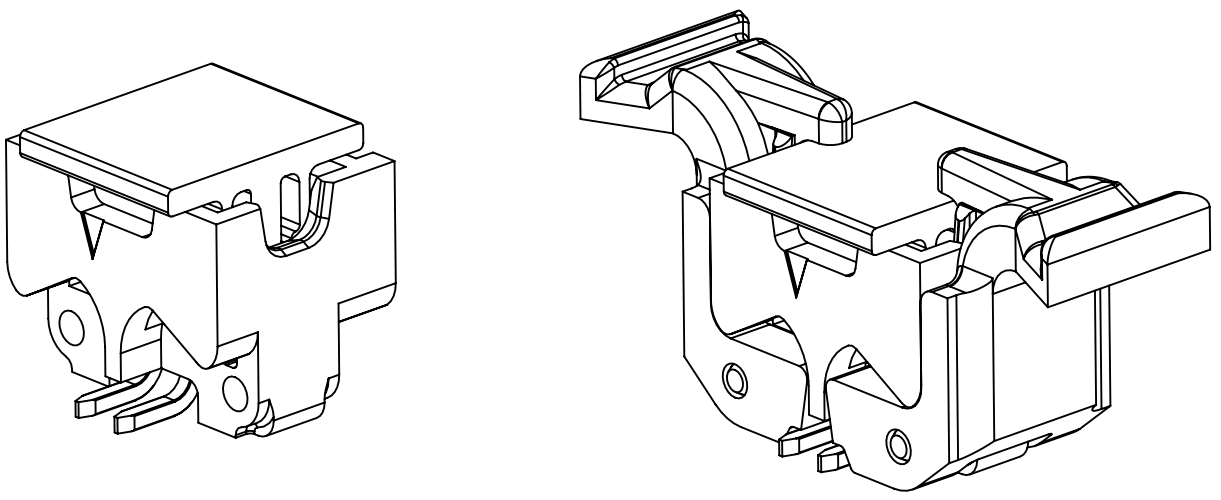
WITH LATCH/EJECT



WITH LATCH/EJECT
AND VACUUM CAP
VACUUM CAP IS FULLY SEATED
ON POSITIONS 8 AND HIGHER

TABLE 1: VERTICAL SMT

No. Positions	Dim "A"	Dim "B"	Dim "C"	Dim "D"
4	.050	.215	.270	.600
6	.100	.265	.320	.650
8	.150	.315	.370	.700
10	.200	.365	.420	.750
12	.250	.415	.470	.800
14	.300	.465	.520	.850
16	.350	.515	.570	.900
20	.450	.615	.670	1.000
26	.600	.765	.820	1.150
30	.700	.865	.920	1.250
40	.950	1.115	1.170	1.500
50	1.200	1.365	1.420	1.750



VACUUM CAP SEATED ON TOP
EDGES OF END WALLS ON
POSITIONS 4 AND 6

78-5100-2436-3
78-5100-2396-9

DESIGN REFERENCE

NEXT ASSEMBLY

DO NOT SCALE DRAWING

SCALE 6/1

TOLERANCES EXCEPT AS NOTED

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5 - 2018

MAX. SURFACE ROUGHNESS

ALL SURFACES

MARKED ONLY

ANGLES

DIVISION

EMSD

DATE NOV 29,2012

DATE NOV 29,2012

DATE NOV 29,2012

DATE NOV 29,2012

REV

ECO

ISSUE DATE AND DESCRIPTION

DRFT

CHKD

3M

3M Center
St. Paul,
MN 55144

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TITLE

SHROUDED BMT HEADER,
.05 X .05 PITCH, L/E,
452 SERIES

CAGE NUMBER

SIZE

DRAWING NO.

REV.

MODEL

452

DET

LISTS

YES

NO

SHT 3 OF 5

78-5100-2437-1
DRAWING NUMBER

revision

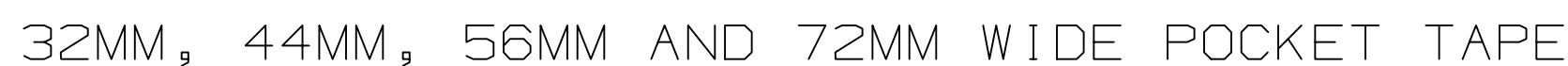
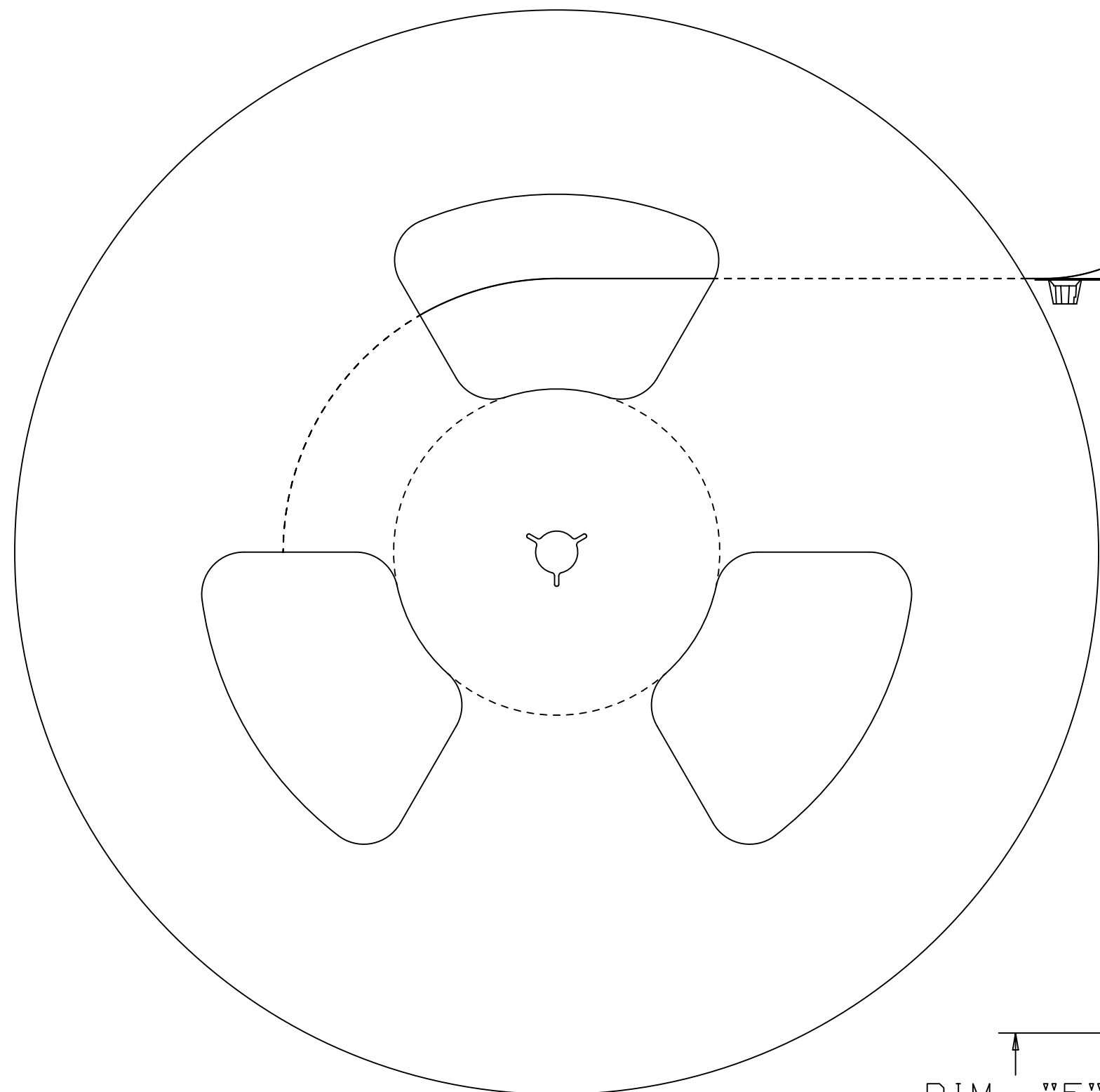
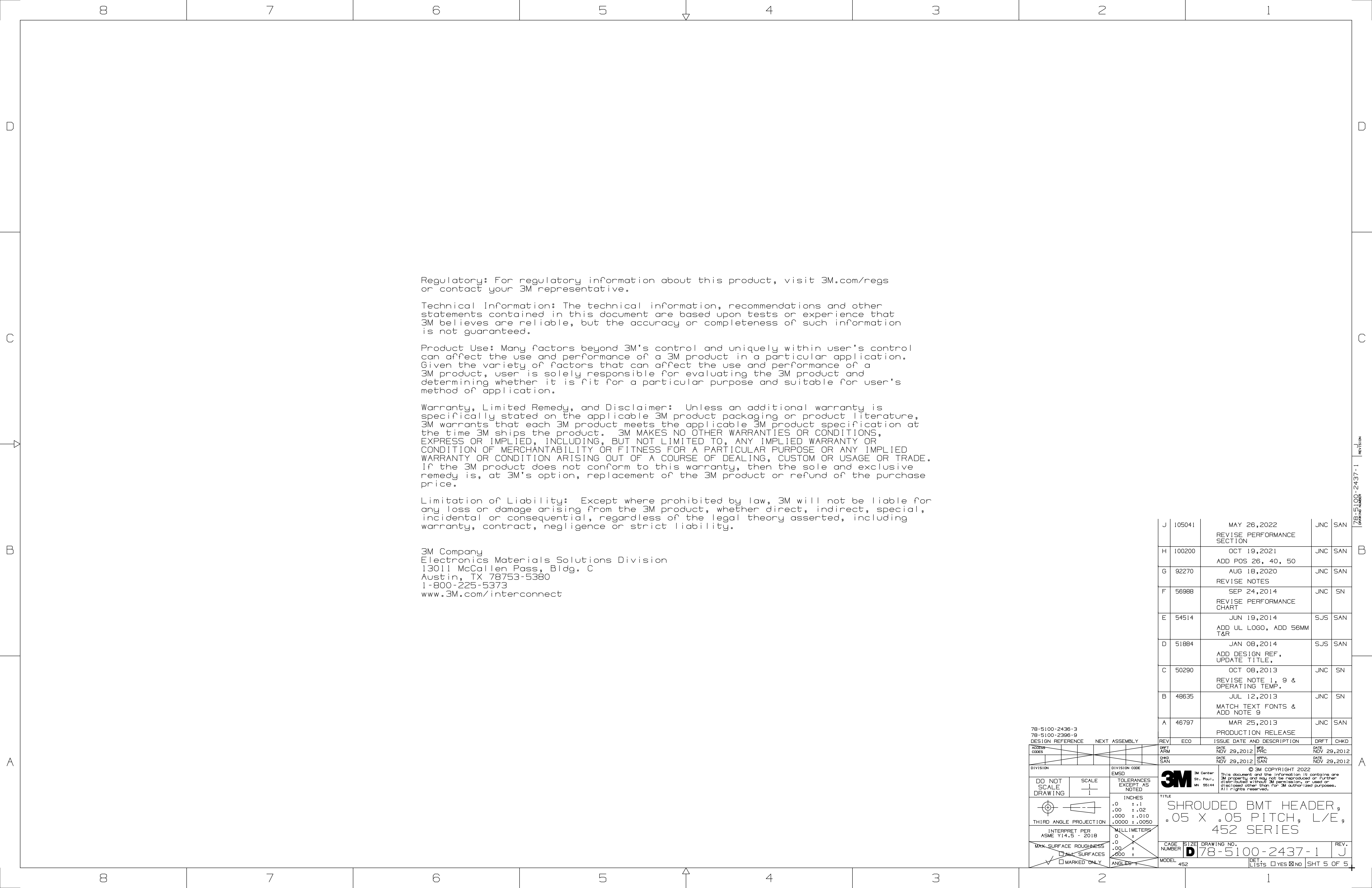


TABLE 2

NOTE:
LATCH AND EJECT HEADERS ARE PACKAGED WITH THE
LATCHES IN AN OPEN POSITION.

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	TITLE SHROUDED BMT HEADER, .05 X .05 PITCH, L/E, 452 SERIES		
CAGE NUMBER	SIZE D	DRAWING NO. 78-5100-2437-1	REV. J
MODEL 452	DET. LISTS ☐ YES ☒ NO SHT 4 OF 5		

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CASE NUMBER	SIZE D	DRAWING NO. 78-5100-2437-1	REV. J
MODEL 452	DET. LISTS ☐ YES ☒ NO SHT 4 OF 5		



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CHKD	SAN	DATE NOV 29,2012	APPR	DATE NOV 29,2012
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452 SERIES				
CAGE NUMBER	SIZE	DRAWING NO.	REV.	
D		78-5100-2437-1	J	
MODEL	452	DET	LISTS	YES ☐ NO ☒
SHT 5 OF 5				