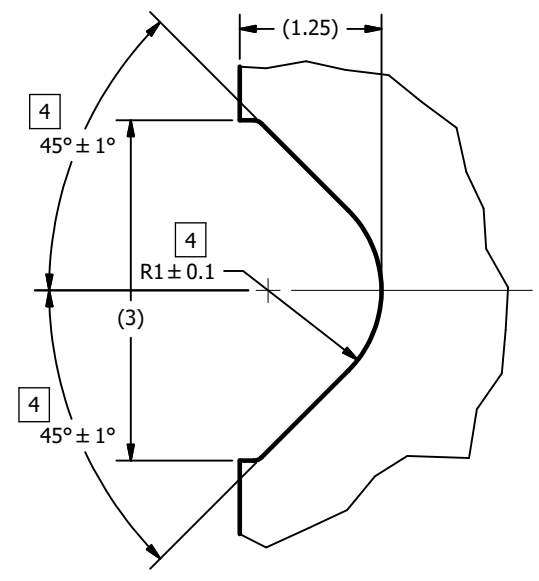
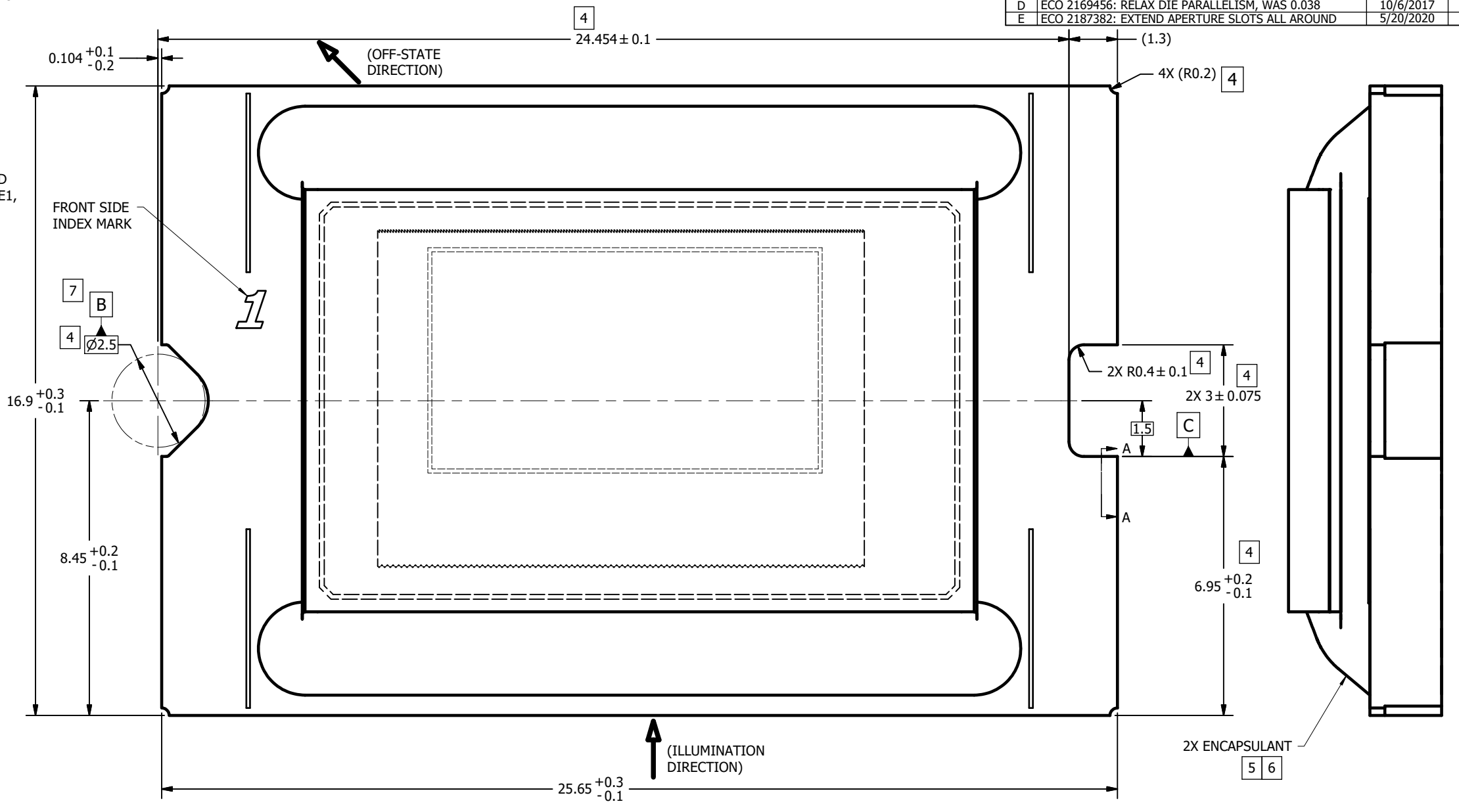


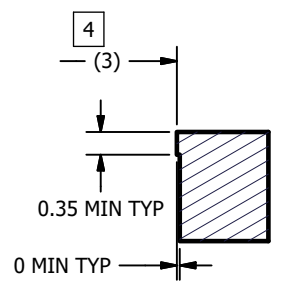
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REVISIONS			
REV	DESCRIPTION	DATE	BY
A	ECO 2162276: INITIAL RELEASE	11/14/2016	BMH
B	ECO 2167828: CORRECT BACK SIDE MARKING; WAS 227-X	7/24/2017	BMH
C	ECO 2168706: ADD APERTURE SLOTS PICTORIALY	9/14/2017	BMH
D	ECO 2169456: RELAX DIE PARALLELISM, WAS 0.038	10/6/2017	BMH
E	ECO 2187382: EXTEND APERTURE SLOTS ALL AROUND	5/20/2020	BMH

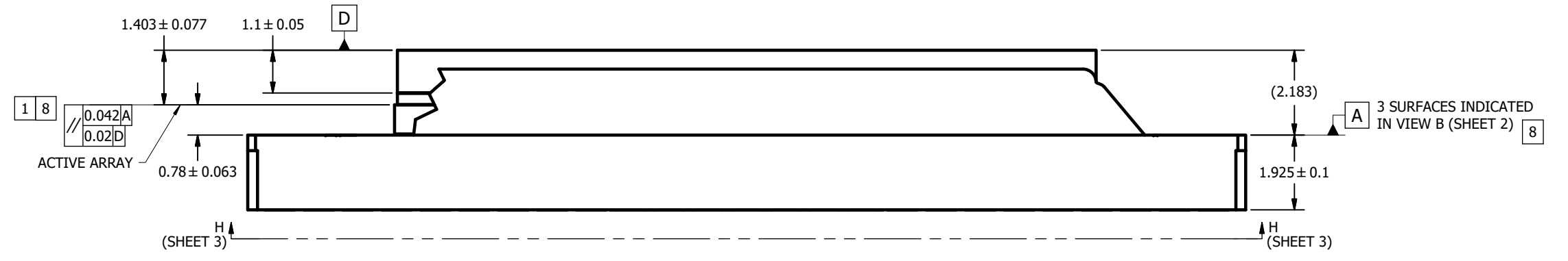
- NOTES UNLESS OTHERWISE SPECIFIED:
- 1 DIE PARALLELISM TOLERANCE APPLIES TO DMD ACTIVE ARRAY ONLY.
  - 2 ROTATION ANGLE OF DMD ACTIVE ARRAY IS A REFINEMENT OF THE LOCATION TOLERANCE AND HAS A MAXIMUM ALLOWED VALUE OF 0.6 DEGREES.
  - 3 BOUNDARY MIRRORS SURROUNDING THE DMD ACTIVE ARRAY.
  - 4 NOTCH DIMENSIONS ARE DEFINED BY UPPERMOST LAYERS OF CERAMIC, AS SHOWN IN SECTION A-A.
  - 5 ENCAPSULANT TO BE CONTAINED WITHIN DIMENSIONS SHOWN IN VIEW D (SHEET 3). NO ENCAPSULANT IS ALLOWED ON TOP OF THE WINDOW.
  - 6 ENCAPSULANT NOT TO EXCEED THE HEIGHT OF THE WINDOW.
  - 7 SEE DETAIL B FOR "V-NOTCH" DIMENSIONS.
  - 8 WHILE ONLY THE THREE DATUM A TARGET AREAS A1, A2, AND A3 ARE USED FOR MEASUREMENT, ALL 4 CORNERS SHOULD BE CONTACTED, INCLUDING E1, TO SUPPORT MECHANICAL LOADS.



DETAIL B  
V-NOTCH  
SCALE 30 : 1



SECTION A-A  
(ROTATED 90°)



UNLESS OTHERWISE SPECIFIED ● DIMENSIONS ARE IN MILLIMETERS ● TOLERANCES: ANGLES ± 1° 2 PLACE DECIMALS ± 0.25 1 PLACE DECIMALS ± 0.50 ● DIMENSIONAL LIMITS APPLY BEFORE PROCEEDING ● INTERPRET DIMENSIONS IN ACCORDANCE WITH ASME Y14.5M-1994 ● REMOVE ALL BURRS AND SHARP EDGES ● PARENTHETICAL INFORMATION FOR REFERENCE ONLY	DRAWN B. HASKETT ENGINEER B. HASKETT QA/CE P. KONRAD CM S. SUSI	DATE 11/14/2016 11/14/2016 11/14/2016 11/15/2016	TEXAS INSTRUMENTS Dallas, Texas TITLE ICD, MECHANICAL, DMD, .47 4K SERIES 316 (FQN PACKAGE)
	M. DORAK APPROVED R. LONG	DATE 11/17/2016 11/16/2016	

D

D

C

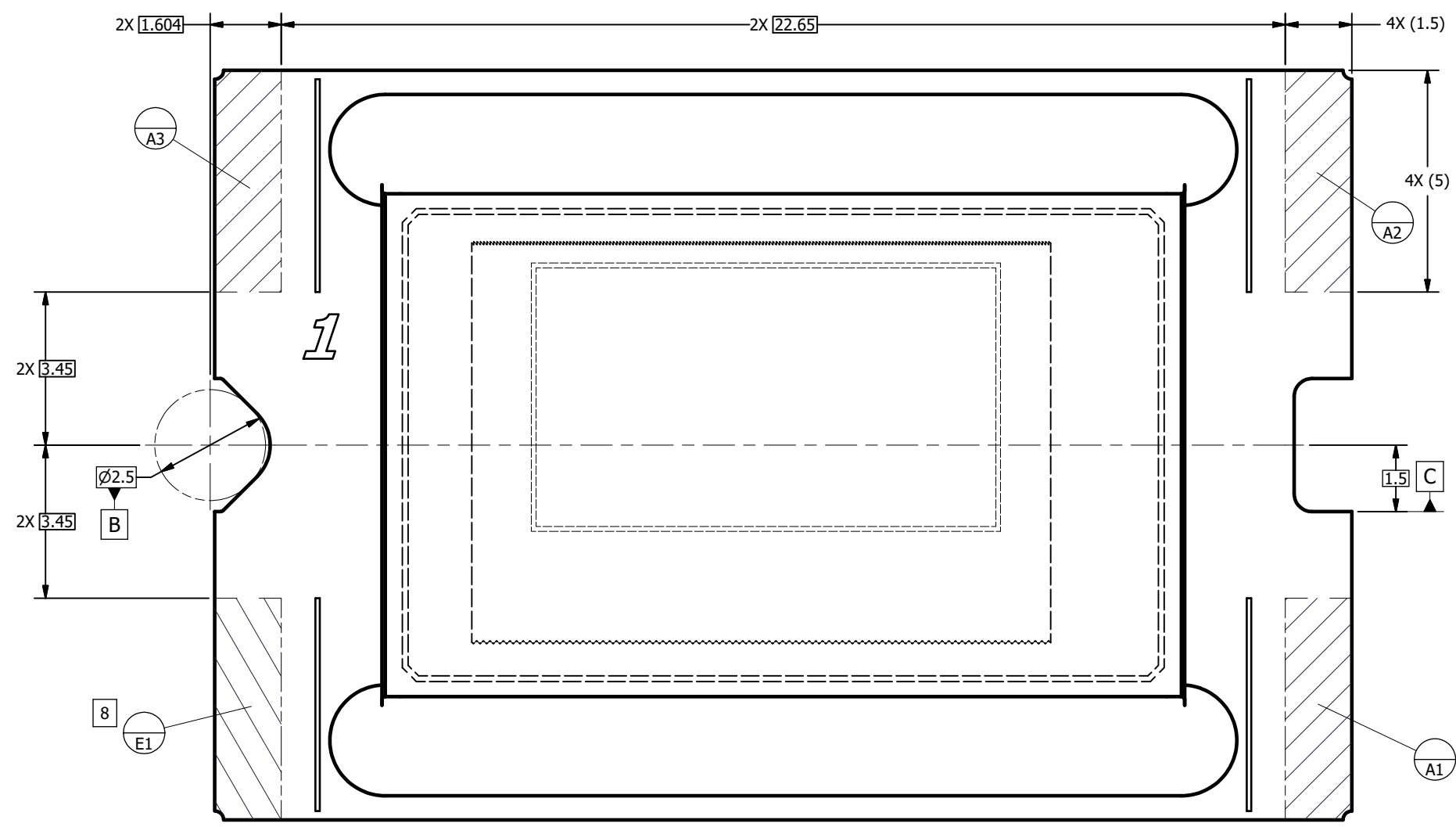
C

B

B

A

A



VIEW C  
 DATUMS A AND E  
 (FROM SHEET 1)

D

D

C

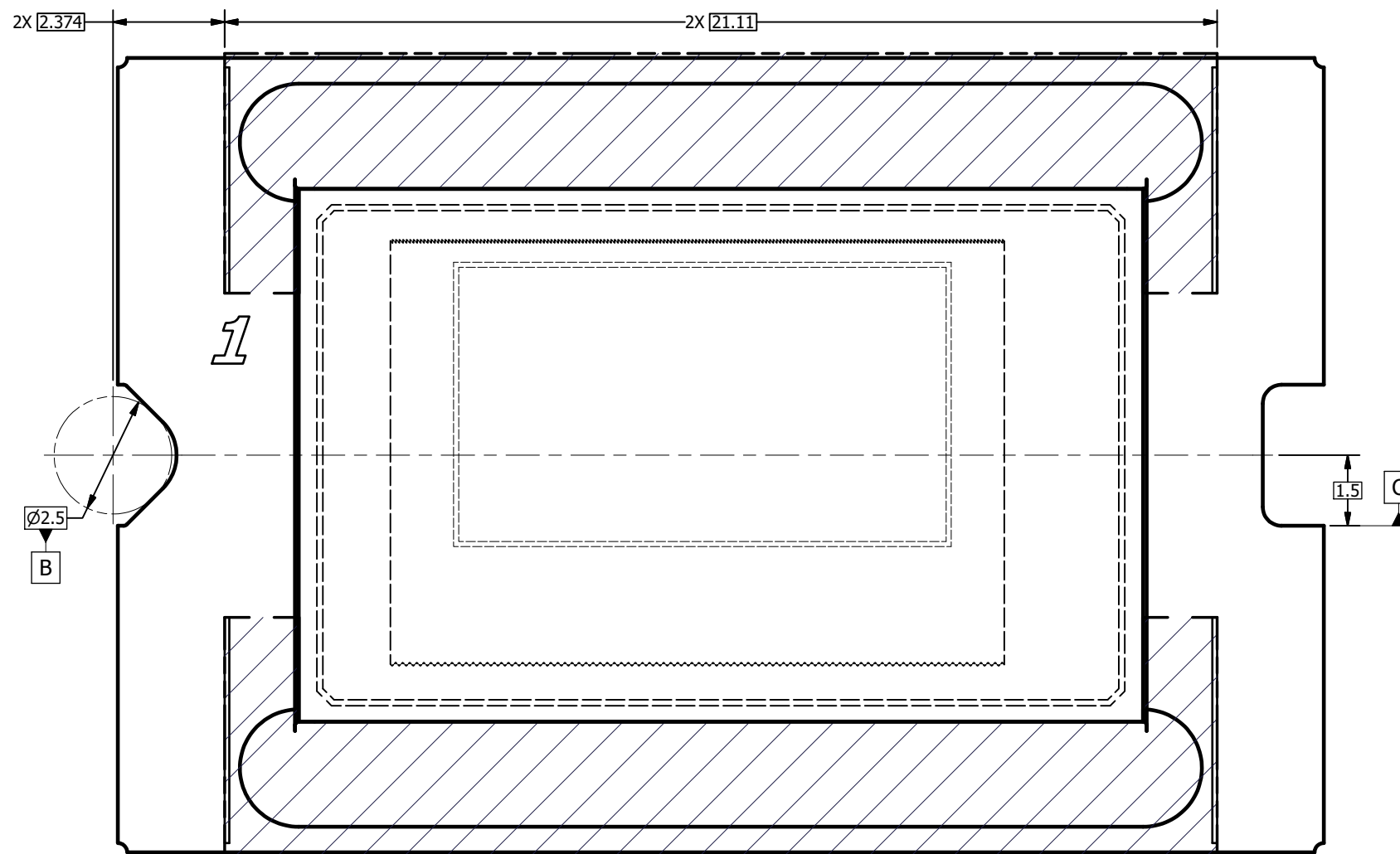
C

B

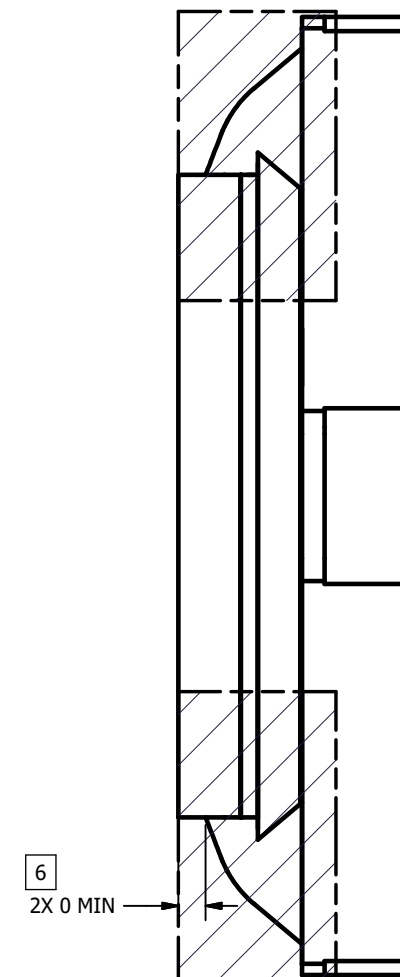
B

A

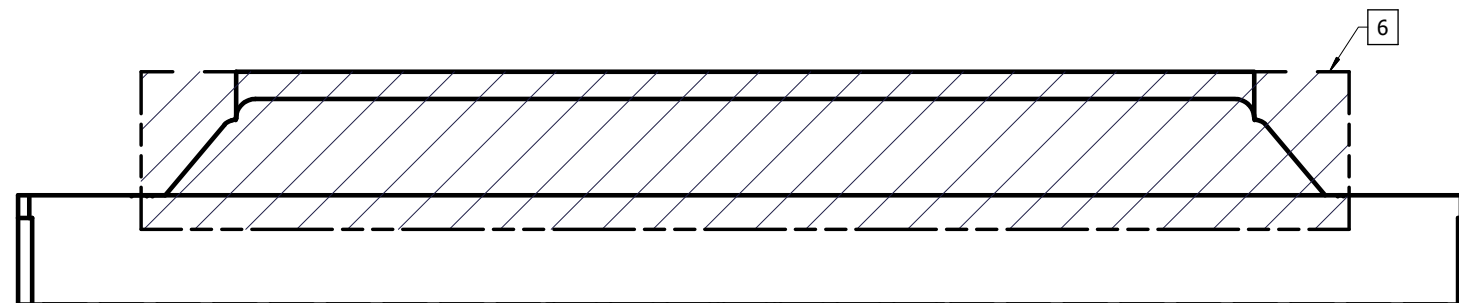
A



VIEW D  
ENCAPSULANT MAXIMUM X/Y DIMENSIONS [5]  
(FROM SHEET 1)



VIEW E  
MAXIMUM ENCAPSULANT HEIGHT



D

D

C

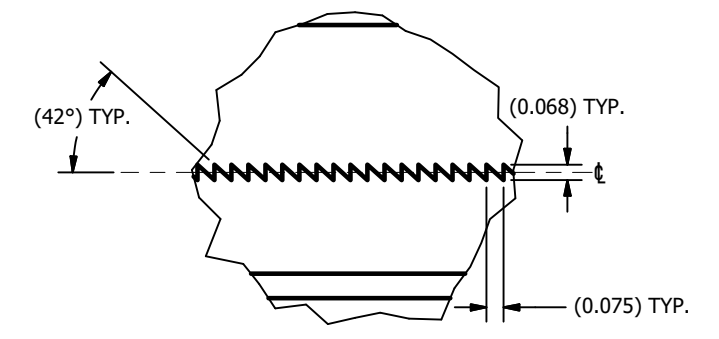
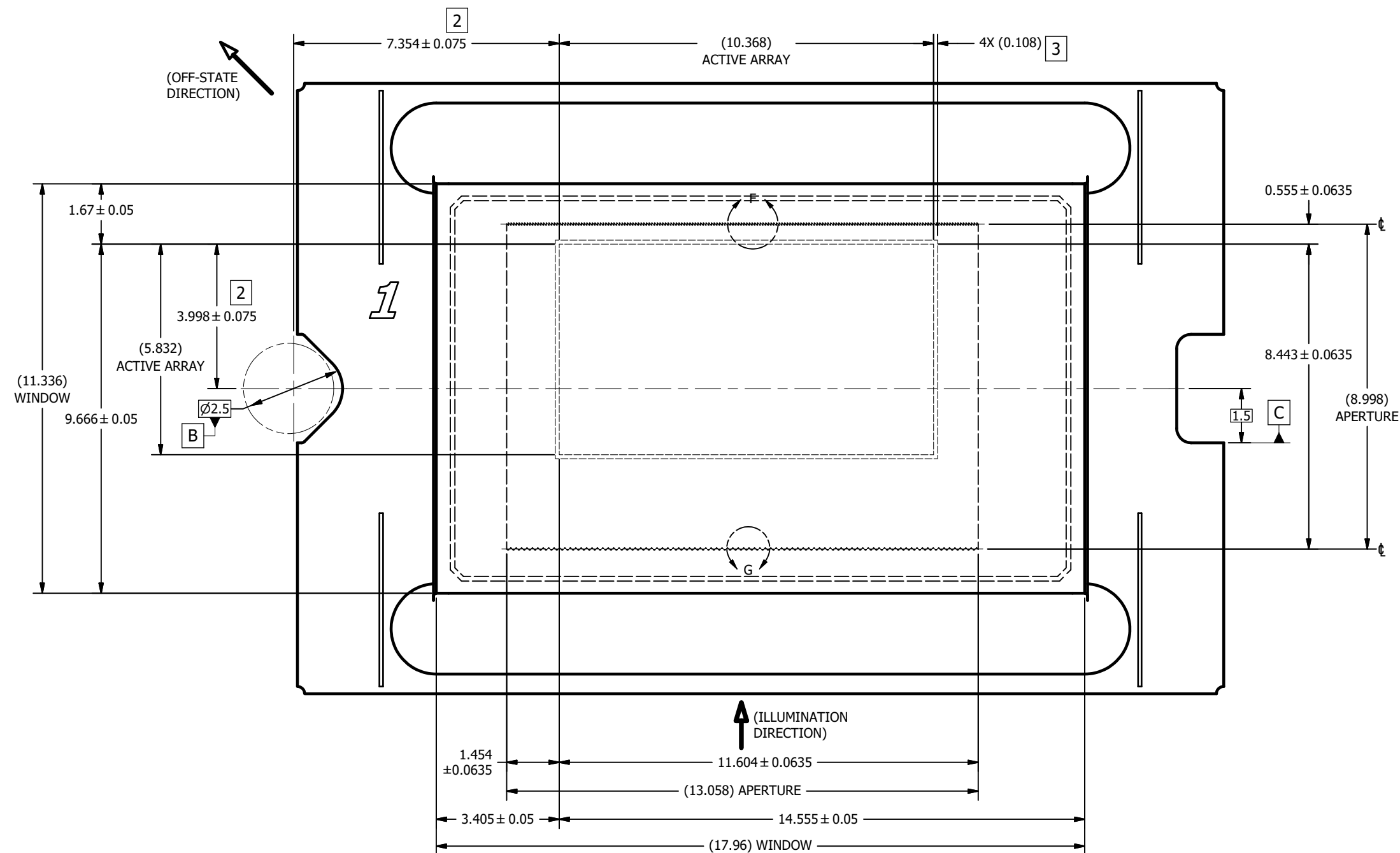
C

B

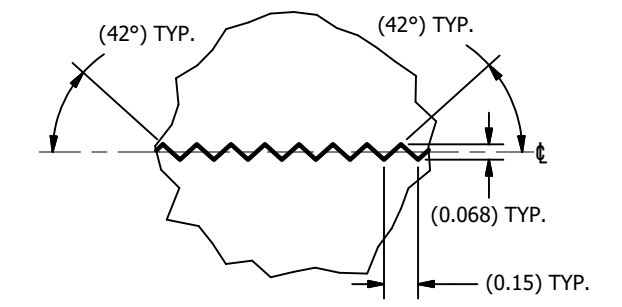
B

A

A



**DETAIL F**  
**APERTURE TOP EDGE**  
 SCALE 60 : 1



**DETAIL G**  
**APERTURE BOTTOM EDGE**  
 SCALE 60 : 1

**VIEW E**  
**WINDOW AND ACTIVE ARRAY**  
 (FROM SHEET 1)

D

D

C

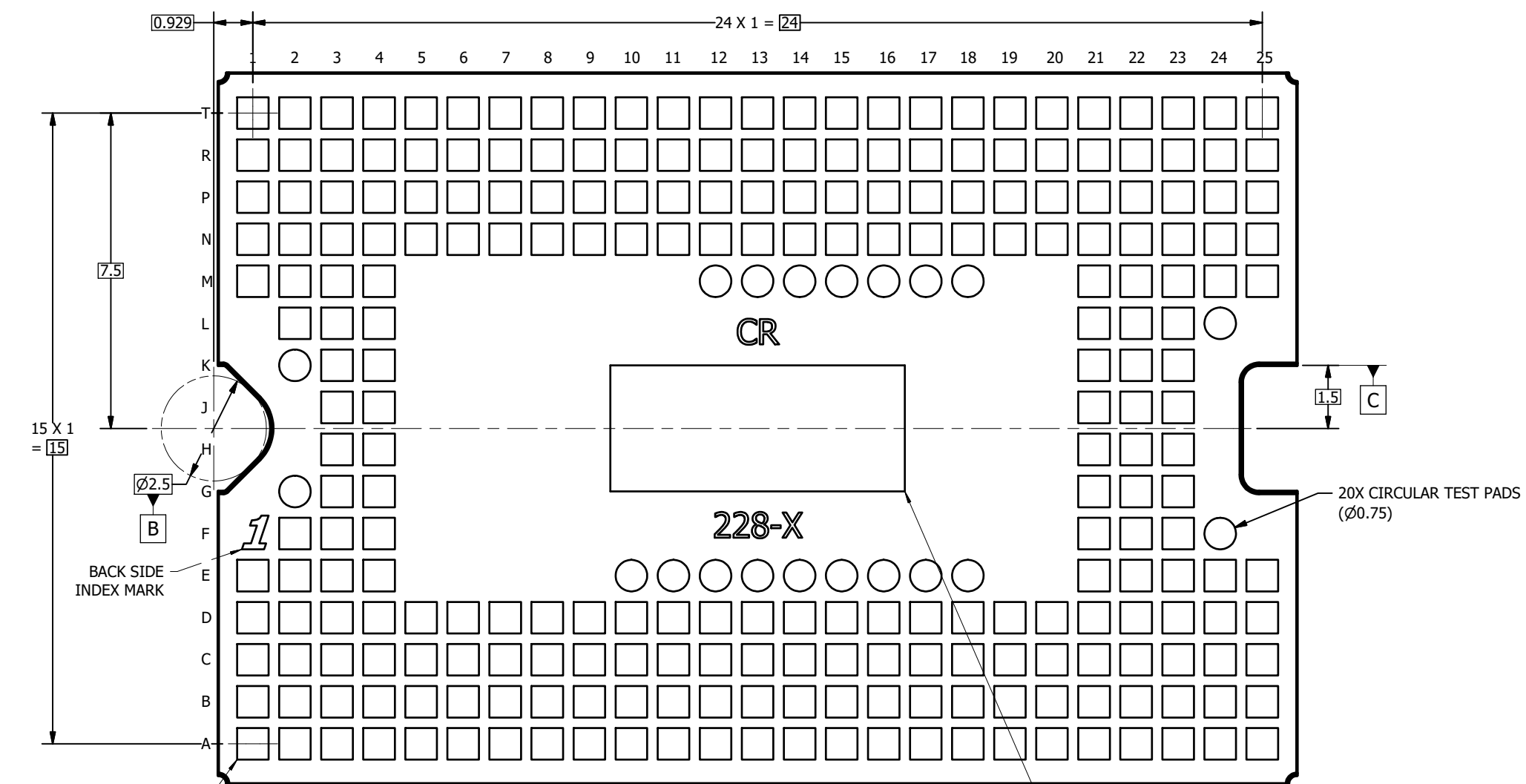
C

B

B

A

A



250X SQUARE LGA PADS  
 0.75±0.05 X 0.75±0.05

0.2	A	B	C
0.1	A		

VIEW H-H  
 BACK SIDE METALLIZATION  
 (FROM SHEET 1)

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