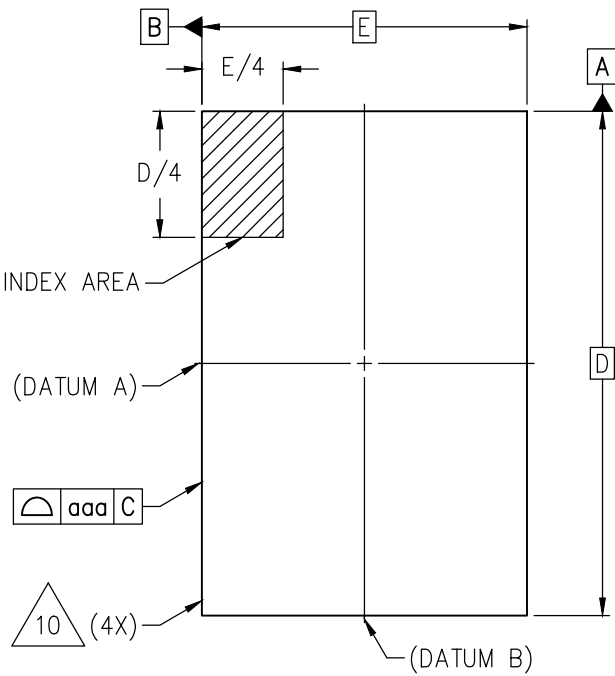


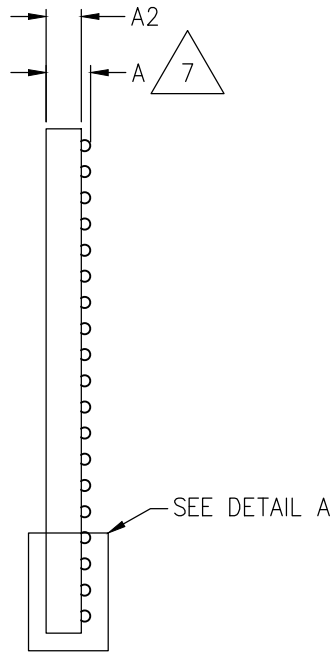
DATE CREATED		REVISIONS		
REV	DESCRIPTION	AUTHOR		
09/12/17 00	INITIAL RELEASE	CK		
06/26/18 01	ADD COMPONENT OUTLINE FOR FOOT PRINT	CK		

NOTE: REFER TO DCP FOR OFFICIAL RELEASE DATE

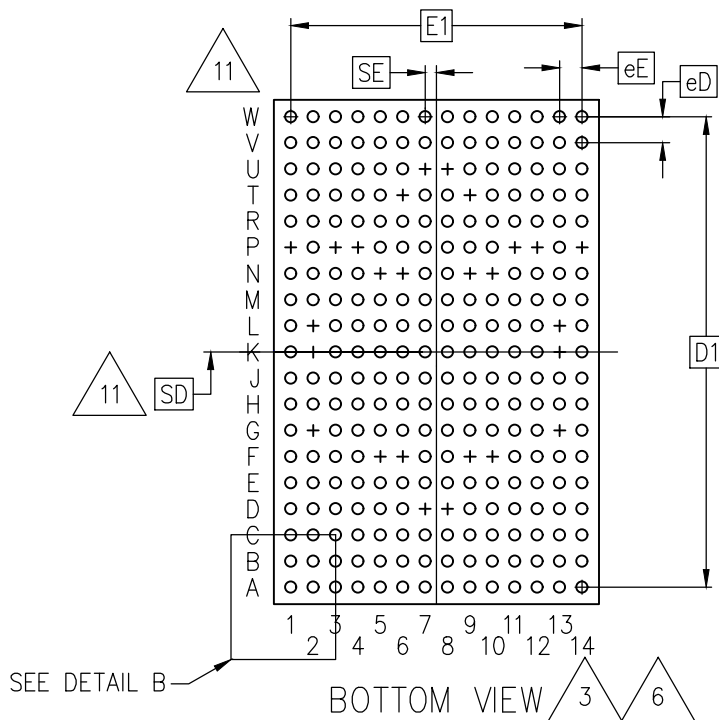
10 TERMINAL A1 CORNER INDEX AREA




TOP VIEW



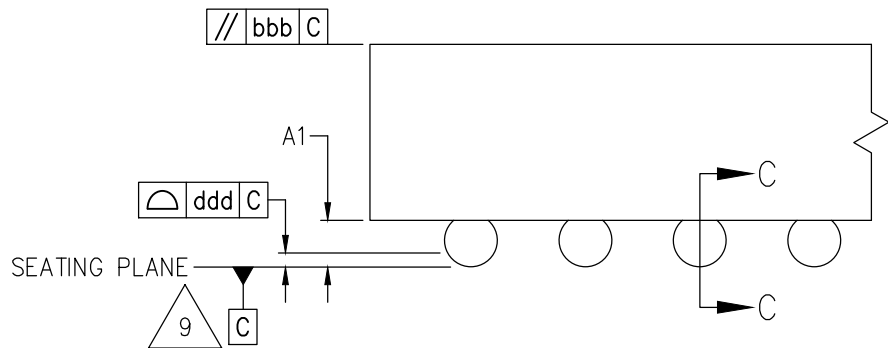
SIDE VIEW



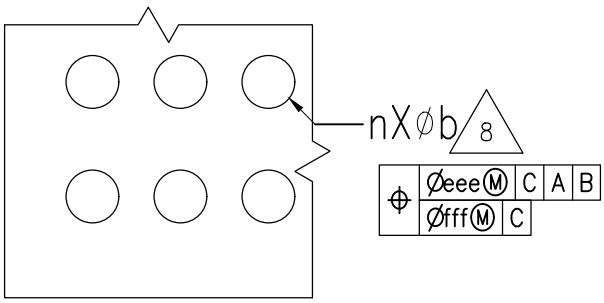
BOTTOM VIEW

TOLERANCES UNLESS SPECIFIED		 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 www.IDT.com FAX: (408) 284-2775
DECIMAL	ANGULAR	
XX±.1	±	
XXX±.05		
XXXX±.030		
TITLE AV/AVG240 8.70 X 13.50 mm BODY DUAL PITCH (0.60MM X 0.70MM) FCCSP		
SIZE	DRAWING No.	REV
C	PSC-4715	01
DO NOT SCALE DRAWING		SHEET 1 OF 6

DATE CREATED		REVISIONS		
REV	DESCRIPTION	AUTHOR		
09/12/17	00	INITIAL RELEASE		CK
06/26/18	01	ADD COMPONENT OUTLINE FOR FOOT PRINT		CK
NOTE: REFER TO DCP FOR OFFICIAL RELEASE DATE				

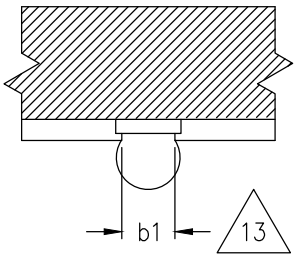


DETAIL A
(ROTATED 90° CW)

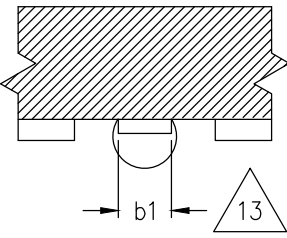


DETAIL B


TYPE 1 – SMD
(SOLDER MASK DEFINED)



TYPE 2 – NSMD
(NON SOLDER MASK DEFINED)



SECTION C-C


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	TITLE AV/AVG240 8.70 X 13.50 mm BODY DUAL PITCH (0.60MM X 0.70MM) FCCSP	
SIZE C	DRAWING No. PSC-4715	REV 01
DO NOT SCALE DRAWING		SHEET 2 OF 6

DATE CREATED	REVISIONS		
	REV	DESCRIPTION	AUTHOR
09/12/17	00	INITIAL RELEASE	CK
06/26/18	01	ADD COMPONENT OUTLINE FOR FOOT PRINT	CK
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COMMON DIMENSIONS				
SYMBOL	V: VERY THIN PROFILE			NOTES
	MIN	NOM	MAX	
A	0.80	0.90	1.00	7
A1	0.15	-	-	9
A2	-	-	0.85	
b	0.25	0.30	0.35	
b1	TYPE1	0.20	-	13
	TYPE2	0.20	-	13
eD	0.70 BSC			4
eE	0.60 BSC			4
NOTES	1, 2			

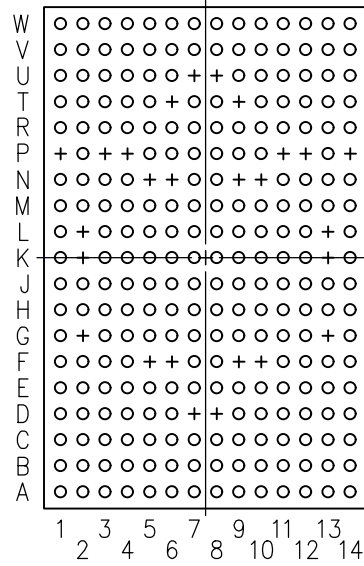
RECTANGULAR VARIATIONS		
VARIATION ► SYMBOL ▼	AA	NOTES
D BSC	13.50	2
E BSC	8.70	2
D1 BSC	12.60	2
E1 BSC	7.80	2
MD	19	
ME	14	
SD BSC	0.00	2
SE BSC	0.30	2
n	240	12
N	266	5
FOOTPRINT	1	12
NOTES	1	

TOLERANCE OF FORM AND POSITION	
SYMBOL	VALUE
aaa	0.15
bbb	0.20
ddd	0.08
eee	0.15
fff	0.05
NOTES	1, 2

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DECIMAL	ANGULAR	
xx±.1	±	www.IDT.com TITLE AV/AVG240 8.70 X 13.50 mm BODY DUAL PITCH (0.60MM X 0.70MM) FCCSP
xxx±.05		SIZE C DRAWING No. PSC-4715 REV 01
xxxx±.030		DO NOT SCALE DRAWING SHEET 3 OF 6

DATE CREATED	REVISIONS		
	REV	DESCRIPTION	AUTHOR
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FOOTPRINT 1 

+ = DEPOPULATED BALL POSITIONS

BOTTOM VIEW


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DECIMAL	ANGULAR	
XX±.1	±	
XXX±.05		
XXXX±.030		
TITLE		AV/AVG240 8.70 X 13.50 mm BODY DUAL PITCH (0.60MM X 0.70MM) FCCSP
SIZE	DRAWING No.	REV
C	PSC-4715	01
DO NOT SCALE DRAWING		SHEET 4 OF 6

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-2009.
2. ALL DIMENSIONS ARE IN MILLIMETERS.
- 3 SOLDER BALL POSITION DESIGNATOR PER JEP95, SECTION 3, SPP-020.
4. 'eD' AND 'eE' REPRESENT THE SOLDER BALL GRID PITCH CORRESPONDING TO THE D AND E DIRECTIONS RESPECTIVELY.
5. N REPRESENTS THE MAXIMUM NUMBER OF SOLDER BALLS FOR MATRIX SIZES MD, ME.
- 6 A FULLY POPULATED 14 X 19 MATRIX SIZE IS SHOWN FOR ILLUSTRATION ONLY.
- 7 DIMENSION "A" INCLUDES STANDOFF HEIGHT "A1", PACKAGE BODY THICKNESS AND LID HEIGHT, BUT DOES NOT INCLUDE ATTACHED FEATURES, e.g. EXTERNAL HEAT SINK. AN INTEGRAL HEAT SLUG IS NOT CONSIDERED AN ATTACHED FEATURE.
- 8 DIMENSION "b" IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER PARALLEL TO PRIMARY DATUM C.
- 9 PRIMARY DATUM C (SEATING PLANE) IS DEFINED BY THE PLANE ESTABLISHED BY THE CONTACT POINTS OF THREE OR MORE SOLDER BALLS THAT SUPPORT THE DEVICE WHEN IT IS PLACED ON TOP OF A PLANAR SURFACE.
- 10 THE CORNER A1 MUST BE IDENTIFIED ON BOTH THE BOTTOM AND TOP SIDES OF THE PACKAGE, THE IDENTIFICATION FEATURE CAN BE MADE USING INK OR METALIZED MARKINGS, IDENTATIONS, OR OTHER FEATURES. THE EXACT SHAPE OF EACH CORNER IS OPTIONAL.
- 11 DIMENSIONS 'SD' AND 'SE' ARE MEASURED WITH RESPECT TO DATUM A AND DATUM B AND DEFINE THE POSITION OF THE CENTER SOLDER BALL IN THE OUTER ROW. WHEN THERE IS AN ODD NUMBER OF SOLDER BALLS IN THE OUTER ROW 'SD' OR 'SE' = 0 WHEN THERE IS AN EVEN NUMBER OF SOLDER BALLS IN THE OUTER ROW, 'SD' = eD/2 AND 'SE' = eE/2.
- 12 SOLDER BALL DEPOPULATION IS ALLOWED. DEPOPULATION IS THE OMISSION OF SOLDER BALLS FROM A FULL MATRIX (MD, ME).
- 13 SOLDERABLE SURFACE MAY BE DEFINED BY AN OPENING IN THE SOLDER RESIST LAYER (TYPE 1) OR BY THE SIZE OF A METALIZED PAD (TYPE 2). IT MAY BE ELLIPTICAL PROVIDED THE RATIO OF MAJOR TO MINOR AXES IS NO GREATER THAN 2/1 AND THE SURFACE AREA IS NO LESS THAN THE MINIMUM FOR A CIRCULAR PAD. FOR TYPE 2 DESIGNS, EXPOSED COPPER TRACES ARE PERMITTED OUTSIDE THE b1 PAD AREA.

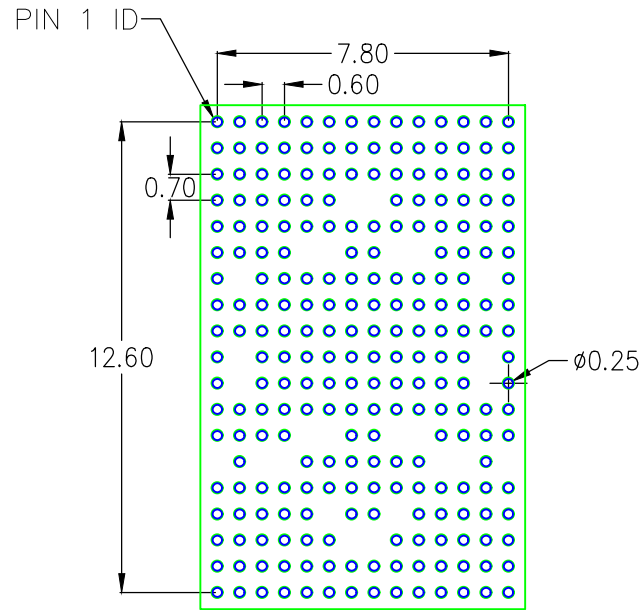
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DECIMAL	ANGULAR		
XX±.1	±	www.IDT.com	
XXX±.05		TITLE AV/AVG240 8.70 X 13.50 mm BODY DUAL PITCH (0.60MM X 0.70MM) FCCSP	
XXXX±.030		SIZE	REV
		C	01
DO NOT SCALE DRAWING		SHEET 5 OF 6	

DATE CREATED	REVISIONS		
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RECOMMENDED LAND PATTERN DIMENSION
(TOP VIEW)

NOTES:

1. ALL DIMENSION ARE IN MM. ANGLES IN DEGREES.
2. TOP DOWN VIEW. AS VIEWED ON PCB.
3. COMPONENT OUTLINE SHOW FOR REFERENCE IN GREEN.
4. LAND PATTERN IN BLUE. NSMD PATTERN ASSUMED.
5. LAND PATTERN RECOMMENDATION PER IPC-7351B GENERIC REQUIREMENT FOR SURFACE MOUNT DESIGN AND LAND PATTERN.

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	TITLE AV/AVG240 8.70 X 13.50 mm BODY DUAL PITCH (0.60MM X 0.70MM) FCCSP	
SIZE C	DRAWING No. PSC-4715	REV 01
DO NOT SCALE DRAWING		SHEET 6 OF 6