

11 TERMINAL A1 CORNER
INDEX AREA

[illegible]

JEDEC SOLID STATE
PRODUCT OUTLINE
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THIS *REGISTERED OUTLINE* HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USAGE IN THE ELECTRONICS INDUSTRY; CHANGES ARE LIKELY TO OCCUR.

UPPER POP BALL GRID
ARRAY FAMILY, SQUARE,
0.50 MM PITCH

PACKAGE DESIGNATOR

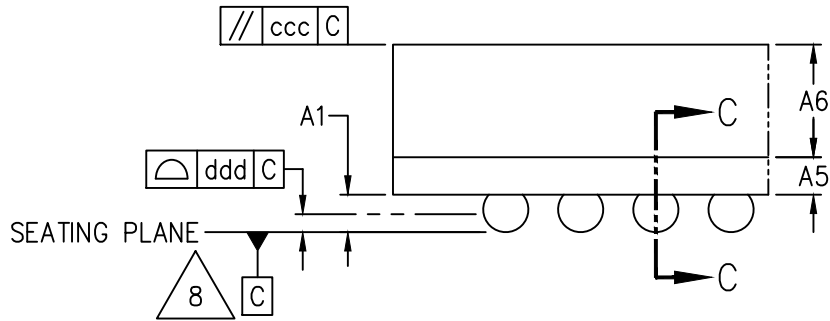
PBGA

ITEM
MO-321

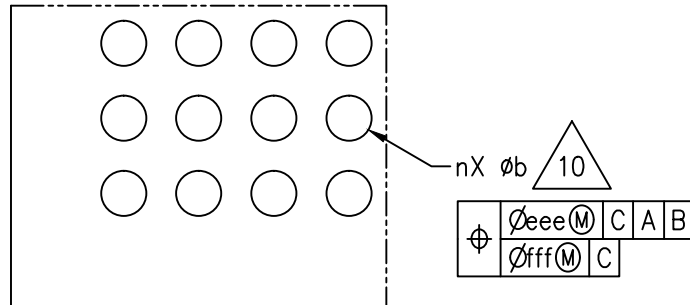
ISSUE
A.01

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SHEET
1 OF 15



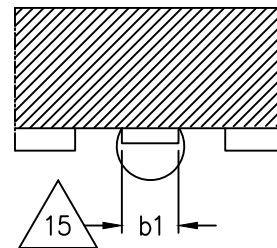
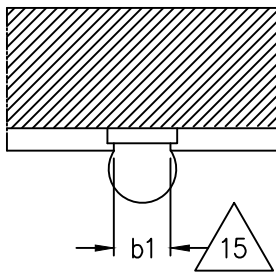
DETAIL A
(ROTATED 90° CW)



DETAIL B

TYPE 1 – SMD
(SOLDER MASK DEFINED)

TYPE 2 – NSMD
(NON SOLDER MASK DEFINED)



SECTION C-C

TABLE 1

COMMON DIMENSIONS							
SYMBOL		P = PACKAGE PROFILE HEIGHT					
		090			100		
		MIN	NOM	MAX	MIN	NOM	MAX
A		> 0.80	----	0.90	> 0.90	----	1.00
A2	b = $\emptyset$ 0.25 NOM	----	----	0.78	----	----	0.88
	b = $\emptyset$ 0.35 NOM	----	----	0.72	----	----	0.82
A5		OPTIONAL – DESIGN SPECIFIC					
A6		OPTIONAL – DESIGN SPECIFIC					
e		0.50 BASIC					
NOTES		1, 2, 9			1, 2, 9		
REF		11–919, 11–941E			11–919, 11–941E		
ISSUE		A.01			A.01		

TABLE 1 CONTINUED

COMMON DIMENSIONS							
SYMBOL		P = PACKAGE PROFILE HEIGHT					
		110			120		
		MIN	NOM	MAX	MIN	NOM	MAX
A		> 1.00	----	1.10	> 1.10	----	1.20
A2	b = $\emptyset$ 0.25 NOM	----	----	0.98	----	----	1.08
	b = $\emptyset$ 0.35 NOM	----	----	0.92	----	----	1.02
A5		OPTIONAL – DESIGN SPECIFIC					
A6		OPTIONAL – DESIGN SPECIFIC					
e		0.50 BASIC					
NOTES		1, 2, 9			1, 2, 9		
REF		11–919, 11–941E			11–919, 11–941E		
ISSUE		A.01			A.01		

TABLE 1 CONTINUED

COMMON DIMENSIONS							
SYMBOL		P = PACKAGE PROFILE HEIGHT					
		130			140		
		MIN	NOM	MAX	MIN	NOM	MAX
A		> 1.20	---	1.30	> 1.30	---	1.40
A2	b = $\emptyset$ 0.25 NOM	---	---	1.18	---	---	1.28
	b = $\emptyset$ 0.35 NOM	---	---	1.12	---	---	1.22
A5		OPTIONAL – DESIGN SPECIFIC					
A6		OPTIONAL – DESIGN SPECIFIC					
e		0.50 BASIC					
NOTES		1, 2, 9			1, 2, 9		
REF		11–919, 11–941E			11–919, 11–941E		
ISSUE		A.01			A.01		

TABLE 1 CONTINUED

COMMON DIMENSIONS							
SYMBOL		P = PACKAGE PROFILE HEIGHT					
		150			160		
		MIN	NOM	MAX	MIN	NOM	MAX
A		> 1.40	---	1.50	> 1.50	---	1.60
A2	b = $\emptyset$ 0.25 NOM	---	---	1.38	---	---	1.48
	b = $\emptyset$ 0.35 NOM	---	---	1.32	---	---	1.42
A5		OPTIONAL – DESIGN SPECIFIC					
A6		OPTIONAL – DESIGN SPECIFIC					
e		0.50 BASIC					
NOTES		1, 2, 9			1, 2, 9		
REF		11–919, 11–941E			11–919, 11–941E		
ISSUE		A.01			A.01		

TABLE 1 CONTINUED

COMMON DIMENSIONS							
SYMBOL		P = PACKAGE PROFILE HEIGHT					
		170			—		
		MIN	NOM	MAX	MIN	NOM	MAX
A		> 1.60	----	1.70	----	----	----
A2	b = $\varnothing$ 0.25 NOM	----	----	1.58	----	----	----
	b = $\varnothing$ 0.35 NOM	----	----	1.52	----	----	----
A5		OPTIONAL – DESIGN SPECIFIC					
A6		OPTIONAL – DESIGN SPECIFIC					
e		0.50 BASIC					
NOTES		1, 2, 9			—		
REF		11–919, 11–941E			—		
ISSUE		A.01			—		