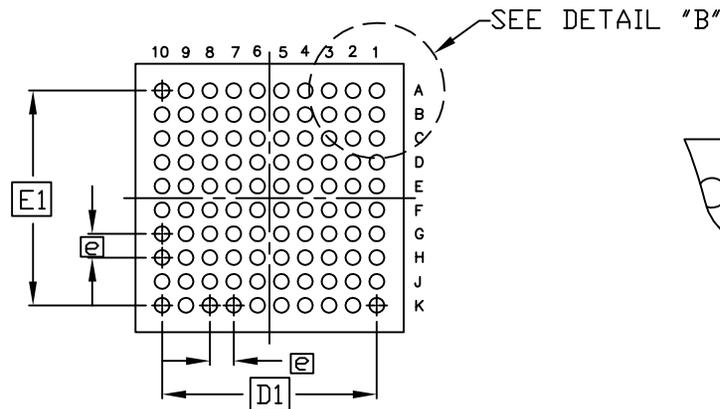
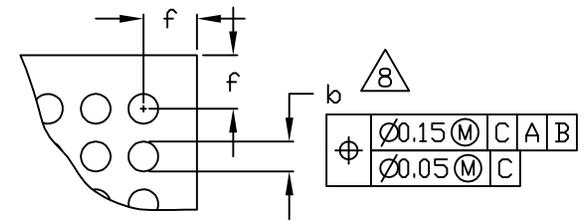


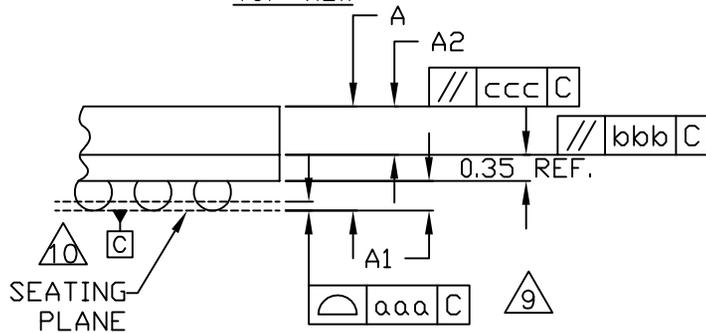
TOP VIEW



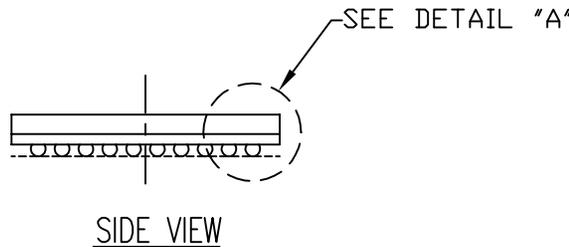
BOTTOM VIEW



DETAIL "B"



DETAIL "A"



SIDE VIEW

DIMENSIONAL REFERENCES			
REF.	MIN.	NOM.	MAX.
A	1.25	1.40	1.50
A1	0.35	0.40	0.45
A2	0.55	0.65	0.75
D	8.90	9.00	9.10
D1	7.20 BSC		
E	8.90	9.00	9.10
E1	7.20 BSC		
b	0.45	0.50	0.55
aaa	--	--	0.12
bbb	--	--	0.10
ccc	--	--	0.10
e	0.80 BSC		
f	0.80	0.90	1.00
M	10		
N	100		

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5M-1994.
3. MATERIAL MUST COMPLY WITH BANNED AND RESTRICTED SUBSTANCES SPEC #10-0131.
4. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
5. DRAWINGS CONFORMS TO JEDEC MO-205 LATEST REVISION.
6. 'e' REPRESENTS THE BASIC SOLDER BALL GRID PITCH.
7. 'M' REPRESENTS THE BASIC SOLDER BALL MATRIX SIZE AND SYMBOL 'N' IS THE NUMBER OF BALLS AFTER DEPOPULATING.
8. 'b' IS MEASURABLE AT THE MAXIMUM SOLDER BALL DIAMETER AFTER REFLOW PARALLEL TO PRIMARY DATUM C.
9. DIMENSION 'aaa' IS MEASURED PARALLEL TO PRIMARY DATUM C.
10. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
11. PACKAGE SURFACE SHALL BE MATTE FINISH.
12. SUBSTRATE MATERIAL BASE IS BT RESIN.
13. ALL DIMENSIONS APPLY TO BOTH LEADED (-) AND PbfREE (+) PKG. CODES.
14. PACKAGE CODES: X100-1, X100-2

-DRAWING NOT TO SCALE-



TITLE:
PACKAGE OUTLINE, 100 BALLS CSBGA,
9x9x1.4mm, 0.8mm PITCH

APPROVAL
EDEN CHEN
04/05/11

DOCUMENT CONTROL NO.
21-0153

REV. 1/1
C