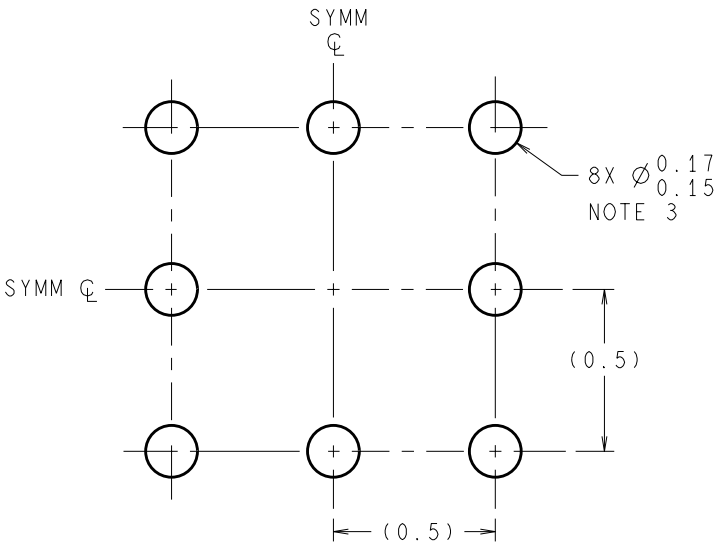
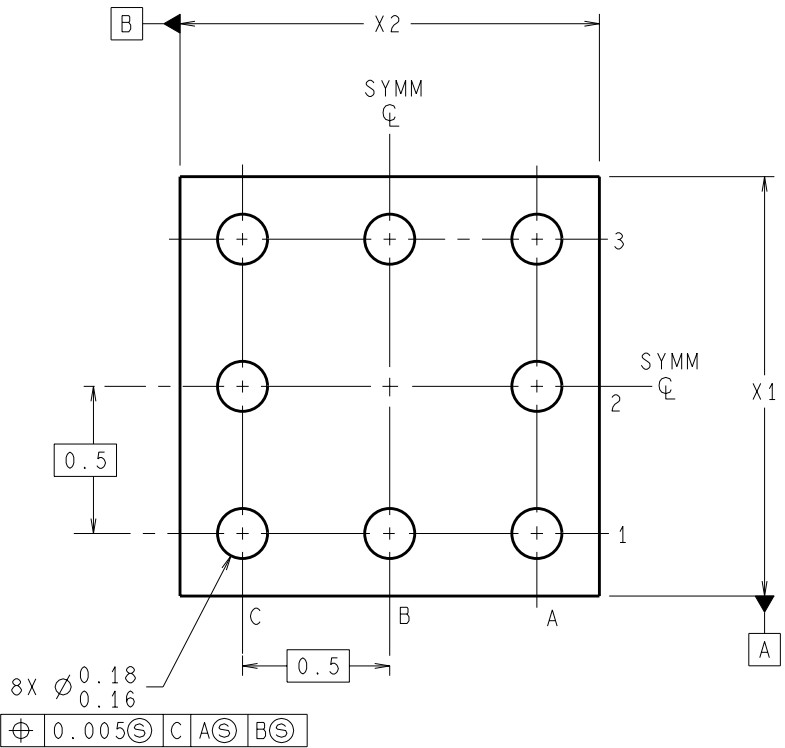
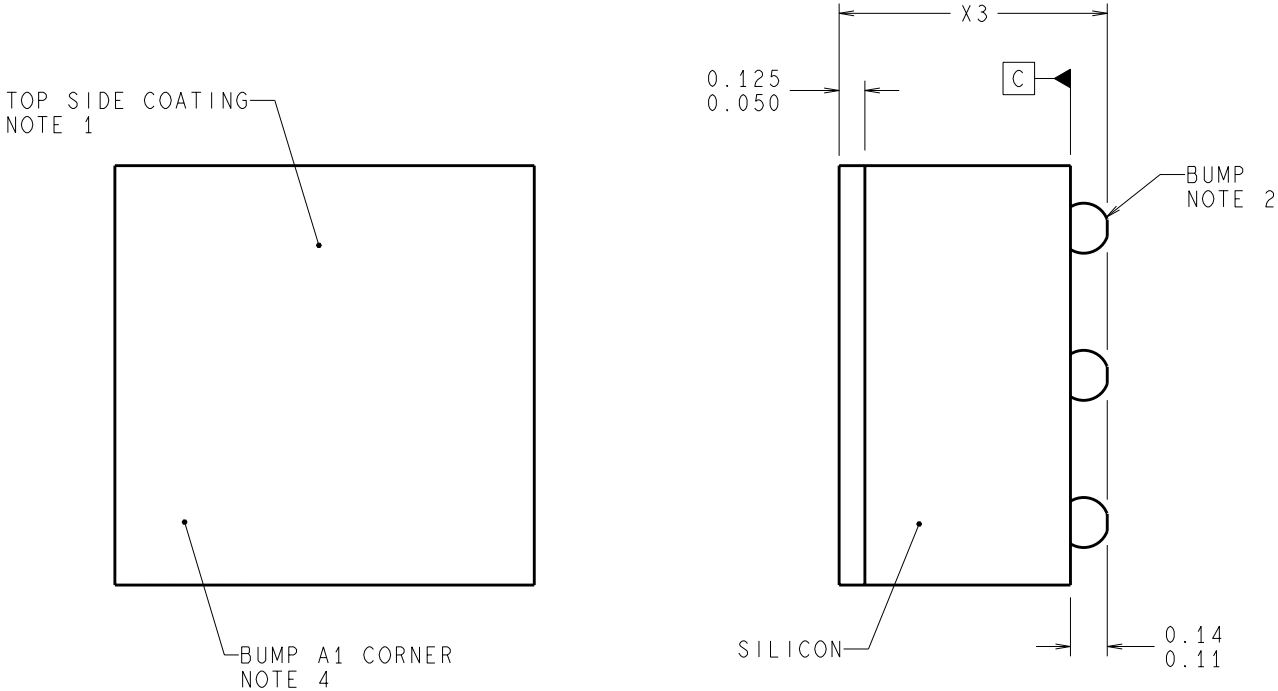




DIMENSIONS ARE IN MILLIMETERS

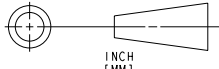
LAND PATTERN RECOMMENDATION



NOTES: UNLESS OTHERWISE SPECIFIED

- EPOXY COATING.
- 63 Sn / 37 Pb EUTECTIC BUMP.
- RECOMMEND NON-SOLDER MASK DEFINED LANDING PAD.
- PIN A1 IS ESTABLISHED BY LOWER LEFT CORNER WITH RESPECT TO TEXT ORIENTATION.
- XXX IN DRAWING NUMBER REPRESENTS PACKAGE SIZE VARIATION WHERE X1 IS PACKAGE WIDTH, X2 IS PACKAGE LENGTH AND X3 IS PACKAGE HEIGHT (SEE TABLE, SHEET 2).
EXAMPLE: BPA08EFB HAS WIDTH=1387, LENGTH=1412, HEIGHT=850
- REFERENCE JEDEC REGISTRATION MO-211, VARIATION BC.

REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	12202	04/28/1999	MS/ECH
B	DIM 0.125/0.05 WAS 0.06/0.04; FLATTEN BUMP HEIGHT BY 0.005mm; X3 TOL 100 WAS 50.	174	10/04/2000	MS/VA
C	CHANGE BUMPS NUMBERING ORDER PER JEDEC; UPDATE NOTE 4.	524	02/06/2002	MS/VP

APPROVALS		DATE		 <i>National Semiconductor</i> 2900 Semiconductor Dr., Santa Clara, CA 95052-8090 MICRO SMD, 8 BUMP, 0.5mm PITCH			
DRAWN MARTA SUCHY		04/28/1999					
DFTG. CHK. THANH LEQUANG		02/06/2002					
ENGR. CHK. VIRAJ PATWARDHAN		02/06/2002					
PROJECTION  INCH [MM]				SCALE	SIZE	DRAWING NUMBER	REV
				N/A	C	(SC)MKT-BPA08XXX	C
				DO NOT SCALE DRAWING		SHEET 1 of 2	

REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
	SEE SHEET 1			

8 BUMP NOMINAL PACKAGE DIMENSIONS					
X1 DESIGNATOR	X1 PACKAGE WIDTH ($\pm 30\mu\text{m}$)	X2 DESIGNATOR	X2 PACKAGE LENGTH ($\pm 30\mu\text{m}$)	X3 DESIGNATOR	X3 PACKAGE HEIGHT ($\pm 100\mu\text{m}$)
A	1285	A	1285	A	700
B	1311	B	1311	B	850
C	1336	C	1336	C	900
D	1361	D	1361		
E	1387	E	1387		
F	1412	F	1412		
G	1438	G	1438		
H	1463	H	1463		
J	1488	J	1488		
K	1514	K	1514		
L	1539	L	1539		
M	1565	M	1565		
N	1590	N	1590		
P	1615	P	1615		
Q	1641	Q	1641		
R	1666	R	1666		
S	1692	S	1692		
T	1717	T	1717		
U	1742	U	1742		
V	1768	V	1768		
W	1793	W	1793		
X	1819	X	1819		
Y	1844	Y	1844		
2	1869	2	1869		
3	1895	3	1895		
4	1920	4	1920		
5	1946	5	1946		
6	1971	6	1971		

APPROVALS		DATE		 <i>National Semiconductor</i> 2900 Semiconductor Dr., Santa Clara, CA 95052-8090 MICRO SMD, 8 BUMP, 0.5mm PITCH			
DRAWN MARTA SUCHY		04/28/1999					
DFTG. CHK. THANH LEQUANG		02/06/2002					
ENGR. CHK. VIRAJ PATWARDHAN		02/06/2002					
 PROJECTION  INCH [MM]		SCALE	SIZE	DRAWING NUMBER		REV	
		N/A	C	(SC)MKT-BPA08XXX		C	
		DO NOT SCALE DRAWING		SHEET 2 of 2			