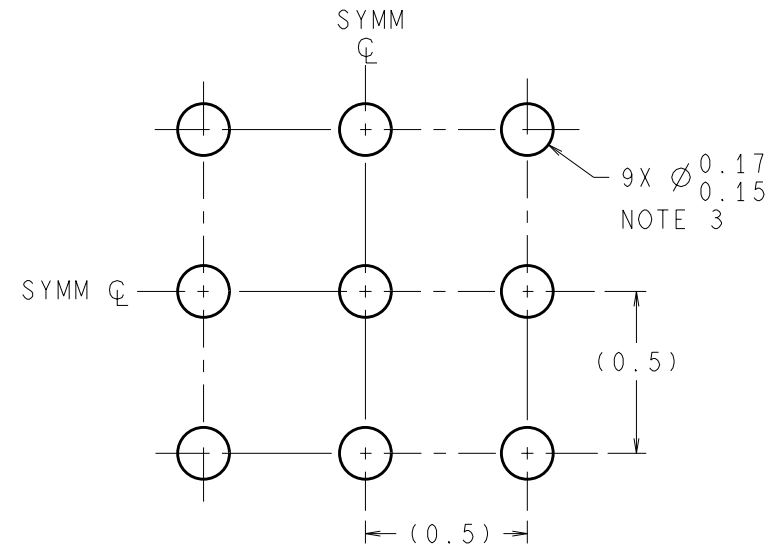
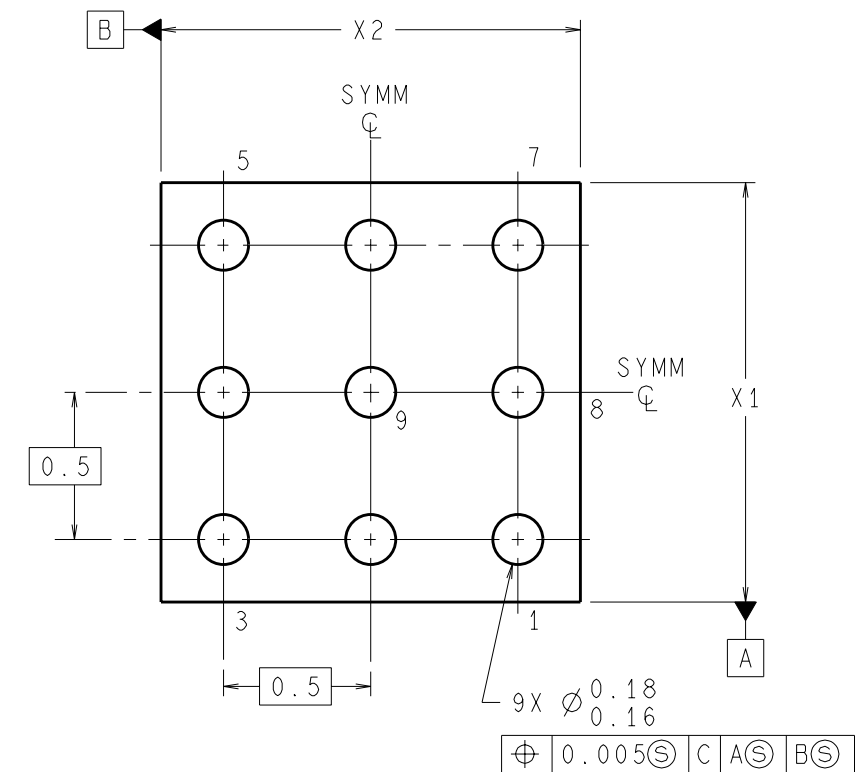
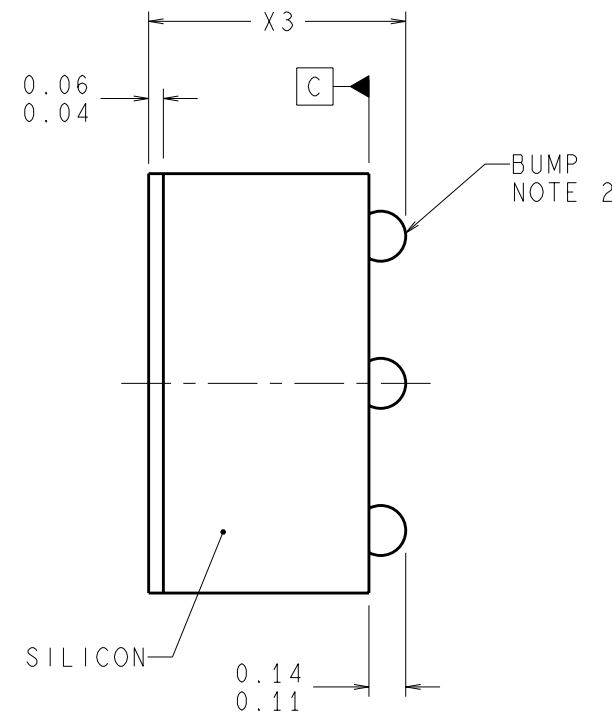
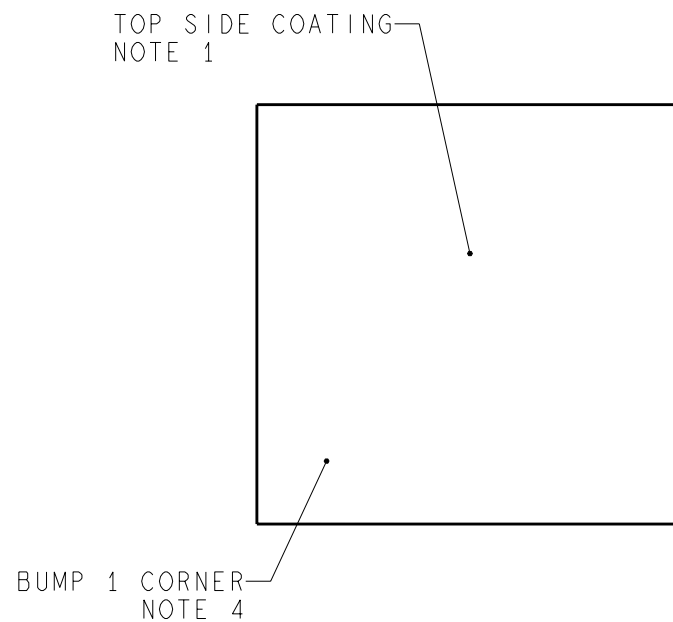


REVISIONS				
LTR	DESCRIPTION	E.C.N.	DATE	BY/APP'D
A	RELEASE TO DOCUMENT CONTROL	120	05/31/2000	MS/VA



**LAND PATTERN RECOMMENDATION**



NOTES: UNLESS OTHERWISE SPECIFIED


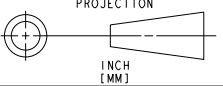
1. EPOXY COATING.
2. 63 Sn / 37 Pb EUTECTIC BUMP.
3. RECOMMEND NON-SOLDER MASK DEFINED LANDING PAD.
4. PIN 1 IS ESTABLISHED BY LOWER LEFT CORNER WITH RESPECT TO TEXT ORIENTATION. REMAINING PINS ARE NUMBERED COUNTERCLOCKWISE.
5. XXX IN DRAWING NUMBER REPRESENTS PACKAGE SIZE VARIATION WHERE X1 IS PACKAGE WIDTH, X2 IS PACKAGE LENGTH AND X3 IS PACKAGE HEIGHT (SEE TABLE, SHEET 2).  
EXAMPLE: BPA09EFB HAS WIDTH=1387, LENGTH=1412, HEIGHT=850
6. REFERENCE JEDEC REGISTRATION MO-211, VARIATION BC.

**DIMENSIONS ARE IN MILLIMETERS**

APPROVALS	DATE	 National Semiconductor 2900 Semiconductor Dr., Santa Clara, CA 95052-8090		
DRAWN <b>MARTA SUCHY</b>	05/31/2000			
DFTG. CHK. THANH LEQUANG	05/31/2000			
ENGR. CHK. VIVEK ARORA	05/31/2000	<b>MICRO SMD, 9 BUMP, 0.5mm PITCH</b>		
 INCH [MM]				
SCALE	SIZE	DRAWING NUMBER	REV	
N/A	C	(SC)MKT-BPA09XXX	A	
DO NOT SCALE DRAWING			SHEET 1 of 2	

REVISIONS			
LTR	DESCRIPTION	E.C.N.	DATE
	SEE SHEET 1		

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 ( $\pm 50\mu\text{m}$ )
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	 <b>National Semiconductor</b> 2900 Semiconductor Dr., Santa Clara, CA 95052-8090			
DRAWN <b>MARTA SUCHY</b>	05/31/2000				
DFTG. CHK. <b>THANH LEQUANG</b>	05/31/2000				
ENGR. CHK. <b>VIVEK ARORA</b>	05/31/2000				
		<b>MICRO SMD, 9 BUMP, 0.5mm PITCH</b>			
		SCALE	SIZE	DRAWING NUMBER	REV
		N/A	C	(SC)MKT-BPA09XXX	A
DO NOT SCALE DRAWING				SHEET 2 of 2	