

5 A-1 CORNER
0.20 X 45° REF

-A- [D] [C] 4X 6

-B-

E

TOP VIEW

0.50 X 45° REF
(3 PLCS)

-C-

DETAIL A

A2

-A- [E]

DETAIL B

S

e

E1

BOTTOM VIEW

S

e

D1

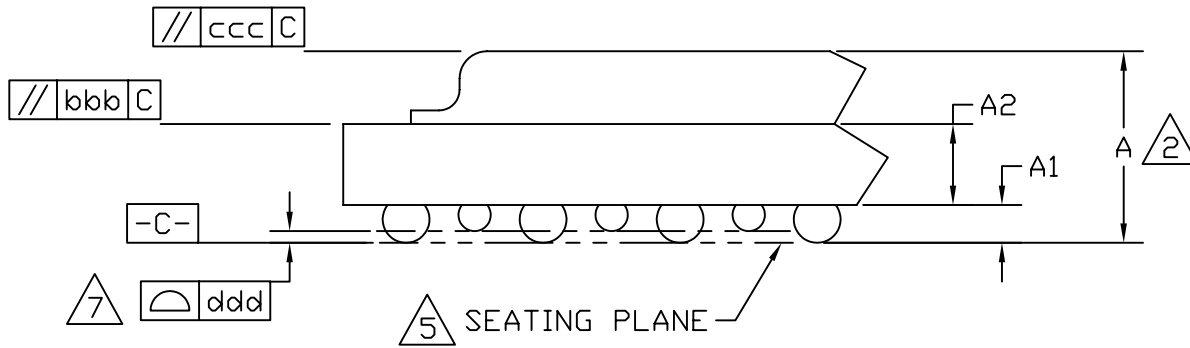
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	-	PRODUCTION RELEASE PER ECN 01-1514	12-17-01	R. J.
	A	REV PER ECN #02-1316	10-03-02	R. J.
	B	REV PER ECD #12095	08-11-05	R. J.

- CONTROLLING DIMENSIONS ARE IN MILLIMETERS.
- DISTANCE FROM THE SEATING PLANE TO THE HIGHEST POINT OF THE PACKAGE INCLUDES STANDOFF HEIGHT A1, PACKAGE BODY THICKNESS A2, AND LID HEIGHT.
- PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
- DIMENSION b IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER IN A PLANE PARALLEL TO PRIMARY DATUM C.
- THE A-1 CORNER IS IDENTIFIED BY A SMALLER CHAMFER, A ROUND DOT ON THE TOP SURFACE, AND A 0.25mm DIA HOLE ON THE BOTTOM SURFACE OF THE PACKAGE.
- BILATERAL TOLERANCE ZONE IS APPLIED TO EACH SIDE OF THE PACKAGE BODY.
- UNIDIRECTIONAL PROFILE TOLERANCE ZONE THAT EXTENDS UPWARDS FROM THE SEATING PLANE, DATUM C. THE LOWEST POINT OF THE BALL APEX MUST LIE IN THIS TOLERANCE ZONE.
- DFOISR 05-S-1877.

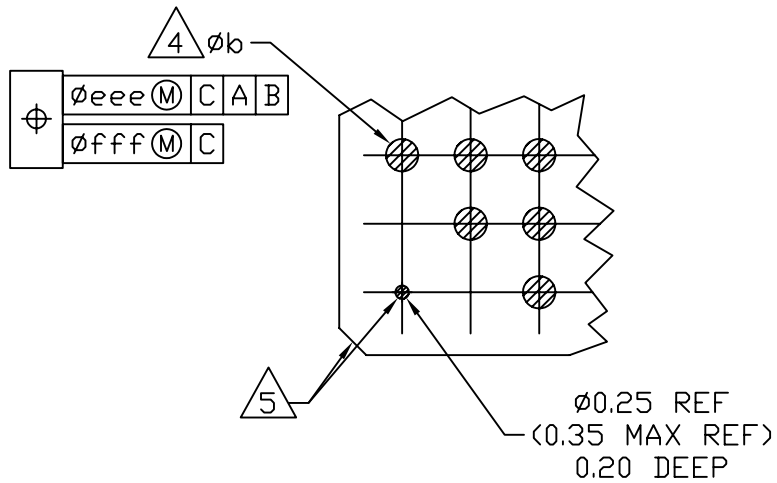
REFERENCE ONLY COPY

QTY REQD	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	REMARKS	ITEM NO.
			T. WAGNER DRAFTSPERSON	12/12/01 DATE	HONEYWELL INC. SOLID STATE ELECTRONICS CENTER MINNEAPOLIS, MINNESOTA
			CHECKER	DATE	312 DBGA CASE OUTLINE
			R. JENSEN ENGINEERING AREA APPROVER	12/17/01 DATE	
			W. BUCKMAN AFFECTED AREA APPROVER	12/17/01 DATE	SIZE CODE IDENT NO. DRAWING NO.
NEXT ASSY	USED ON	L. CHAMAS SRB APPROVER	12/17/01 DATE	B	34168 22025260
APPLICATION				SCALE NONE	SHEET 1 OF 2

September 08, 2005 10:45



DETAIL A (ROTATED 90°)



DETAIL B

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	-	3.76	4.13	-	.148	.163
A1*	0.74	0.84	0.94	.029	.033	.037
A2	1.44	1.60	1.76	.057	.063	.069
b*	0.8	0.9	1.0	.031	.035	.039
D E	23.00			0.906		
D1 E1	21.59			0.850		
e	1.27			0.050		
S	0.635			0.025		
aaa	0.20			0.008		
bbb	0.25			0.010		
ccc	0.35			0.014		
ddd	0.15			0.006		
eee	0.30			0.012		
fff	0.15			0.006		

* ALTERNATE BALL DIAMETERS ARE AVAILABLE

REFERENCE ONLY COPY

SIZE	CODE IDENT NO.	DRAWING NO.
B	34168	22025260
SCALE	NONE	SHEET 2 OF 2