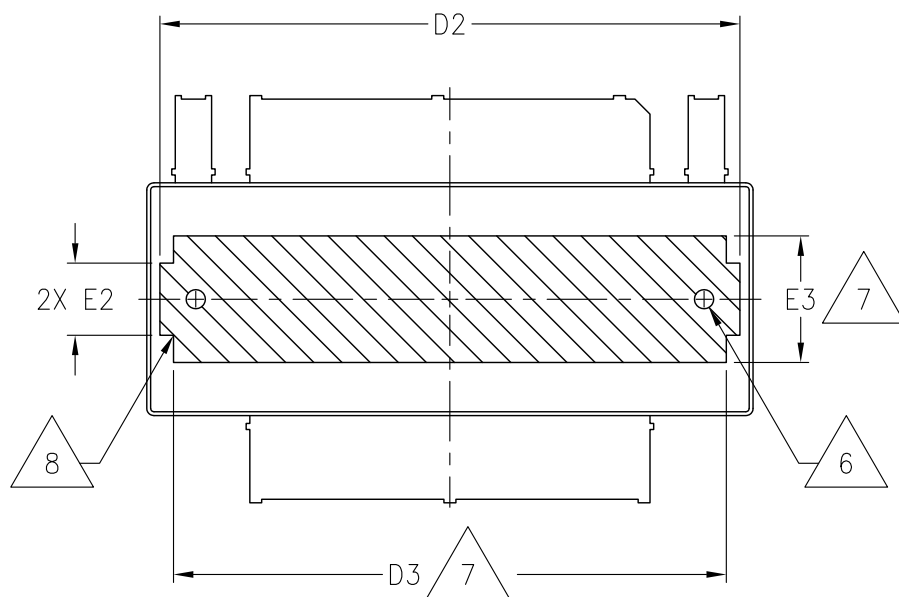
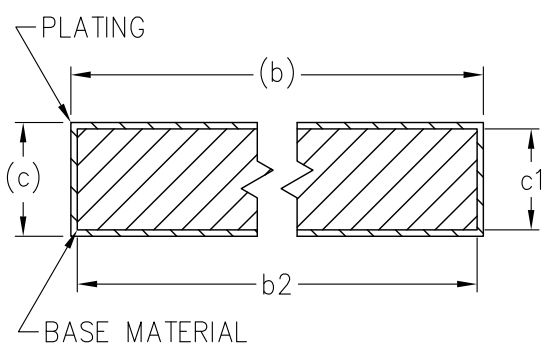


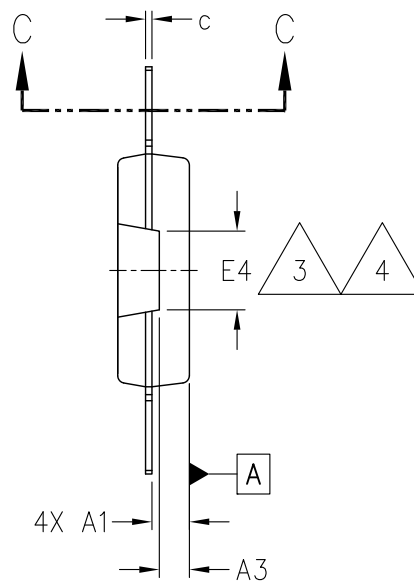
JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2013 JEDEC		THIS <i>REGISTERED OUTLINE</i> HAS BEEN PREPARED BY THE JEDEC JC-11 COMMITTEE AND REFLECTS A PRODUCT WITH ANTICIPATED USAGE IN THE ELECTRONICS INDUSTRY; CHANGES ARE LIKELY TO OCCUR.				
TITLE 4 LEAD FLAT AND GULL WING SURFACE MOUNT POWER PACKAGE		PACKAGE DESIGNATOR HB1-PDSO HB1-PSOF	NUMBER MO-312	ISSUE A	DATE FEB 2013	SHEET 1 OF 7



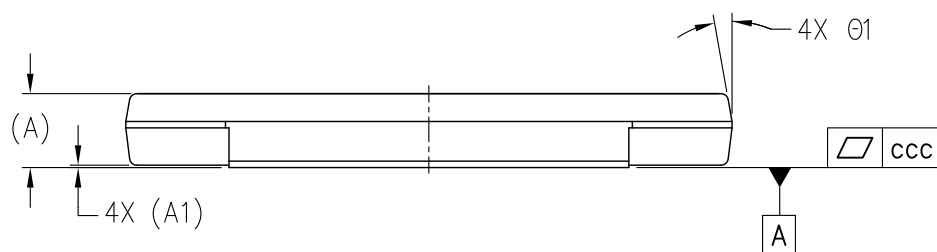
BOTTOM VIEW

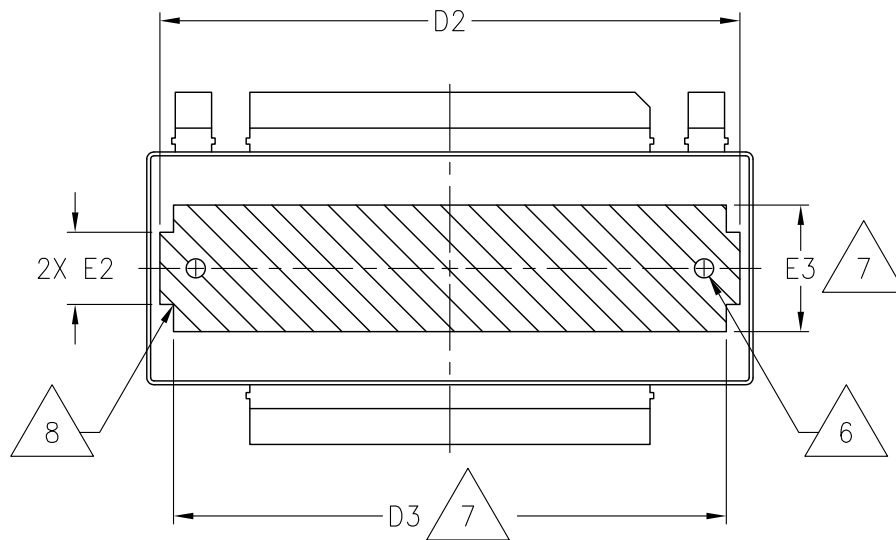


SECTION C-C

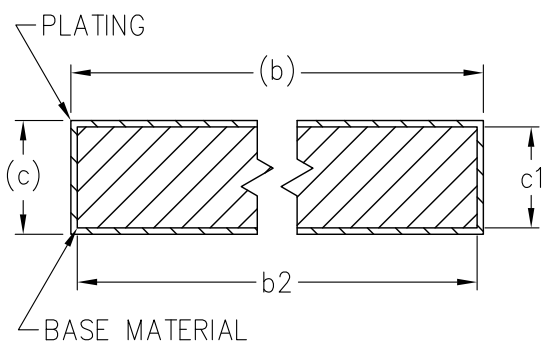


VIEW A-A

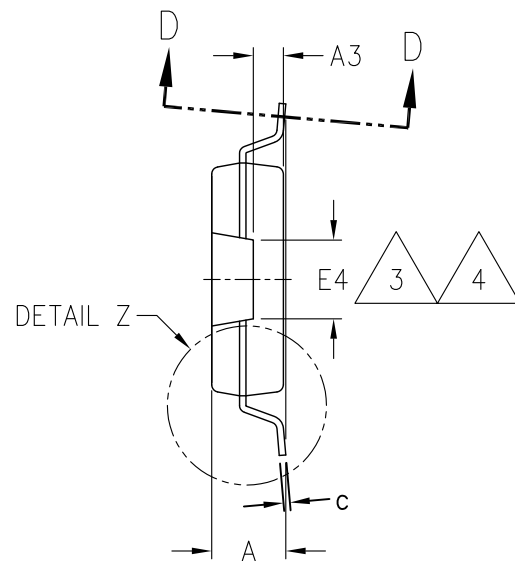




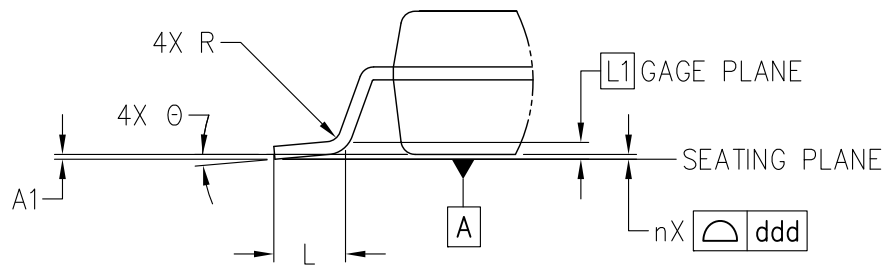
BOTTOM VIEW



SECTION D-D



VIEW B-B



DETAIL Z
ROTATE 90° CCW

TABLE 1

TOLERANCE OF FORM AND POSITION	
SYMBOL	VALUE
aaa	0.20
bbb	0.12
ccc	0.05
ddd	0.10
ISSUE	A
REF	11-875
NOTES	1, 2

TABLE 2

COMMON DIMENSIONS								
SYMBOL	AA – FLAT LEADS				AB – GULL WING LEADS			
	MIN	NOM	MAX	NOTES	MIN	NOM	MAX	NOTES
A	---	3.00	3.10		3.00	3.10	3.20	
A1	1.42	1.57	1.72		---	---	0.10	
A2	---	3.00	3.10		3.00	3.10	3.20	
A3	1.16	1.26	1.36		1.16	1.26	1.36	
b	16.67	---	16.87	5	16.67	---	16.87	
b1	1.42	---	1.62	5	1.42	---	1.62	
b2	16.65	16.75	16.85		16.65	16.75	16.85	
c	0.17	---	0.37		0.17	---	0.37	
c1	0.15	0.25	0.35		0.15	0.25	0.35	
D	25.40 BASIC			3	25.40 BASIC			3
D1	---	---	1.10	4	---	---	1.10	4
D2	24.30	---	---	7	24.30	---	---	7
D3	23.16	---	---		23.16	---	---	
E	16.66	16.76	16.86	5	14.53	14.75	14.93	5
E1	9.75 BASIC			3	9.75 BASIC			3
E2	3.02	---	---		3.02	---	---	
E3	5.30	---	---	7	5.30	---	---	7
E4	3.20	3.30	3.40	3, 4	3.20	3.30	3.40	7
e	21.49 BASIC				21.49 BASIC			
L	---	---	---		1.39	1.49	1.59	
L1	---				0.35 BASIC			
n	4			10	4			10
R	---	---	---		---	---	0.30	
θ	---	---	---		2°	5°	8°	
θ1	---	---	10°		---	---	10°	
ISSUE	A							
REF	11-875							
NOTES	1, 2							

NOTES:

1. DIMENSIONING AND TOLERANCING CONFORM TO ASME Y14.5–2009.

2. ALL DIMENSIONS ARE IN MILLIMETERS.



D AND E1 ARE DETERMINED AT THE PLANE WHERE THE TOP OF THE LEADS EXIT THE PACKAGE. D, E1, AND E4 DO NOT INCLUDE MOLD PROTRUSION. MOLD PROTRUSION SHALL NOT EXCEED 0.30MM PER SIDE.

4. D1 AND E4 DEFINE OPTIONAL FEATURES.

5. THE b, b1, AND E DIMENSION DO NOT INCLUDE DAM BAR PROTRUSION. ALLOWABLE PROTRUSION SHALL BE 0.30MM TOTAL IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL CONDITION.



THE LOCATION AND SIZE OF EJECTOR MARKS AND HEAT SLUG HOLES ARE OPTIONAL.



DIMENSION D2 AND E3 DEFINE THE MINIMUM EXPOSED AREA OF THE HEAT SLUG. THE MAXIMUM EXPOSED AREA OF THE HEAT SLUG MAY EXTEND TO THE PACKAGE EDGE.



CROSSHATCHING REPRESENTS THE EXPOSED AREA OF THE HEAT SLUG.



THE TERMINAL 1 IDENTIFIER AND TERMINAL NUMBERING CONVENTION SHALL CONFORM TO JEP95 SPP–012. DETAILS OF TERMINAL 1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE TERMINAL 1 IDENTIFIER MAY BE EITHER A MOLD, MARKED OR MECHANICAL FEATURE.

10. N IS THE TOTAL NUMBER OF TERMINALS.

CHANGE RECORD

IF THE CHANGE INVOLVES ANY WORDS ADDED OR DELETED (EXCLUDING DELETION OF ACCIDENTALLY REPEATED WORDS), THE CHANGE IS TO BE INCLUDED BELOW. PUNCTUATION CHANGES MAY OR MAY NOT BE INCLUDED.

INITIAL ISSUE: A	DATE: FEB 2013	ITEM NUMBER: 11-875
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CHANGE RECORD HISTORY:

ISSUE:	DATE:	ITEM NUMBER:
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LOCATION:	CHANGED FROM:	CHANGED TO:

ISSUE:	DATE:	ITEM NUMBER:
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LOCATION:	CHANGED FROM:	CHANGED TO: