

JEDEC SOLID STATE
PRODUCT OUTLINE
Copyright © 2023 JEDEC

THIS **REGISTERED OUTLINE** 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 PLASTIC DUAL SMALL
OUTLINE SURFACE TERMINAL,
WETTABLE FLANK PACKAGE

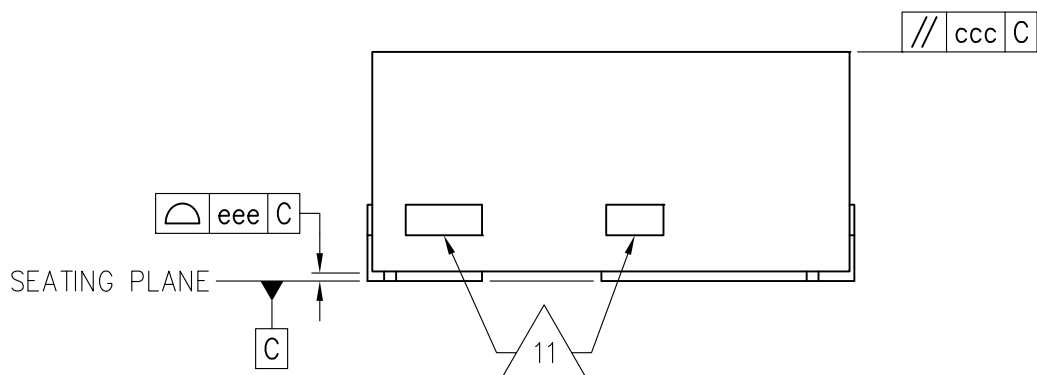
PACKAGE DESIGNATOR
PDSO_N##[#]_L#-
R#x#Z#-
CturET0p04

NUMBER
MO-340

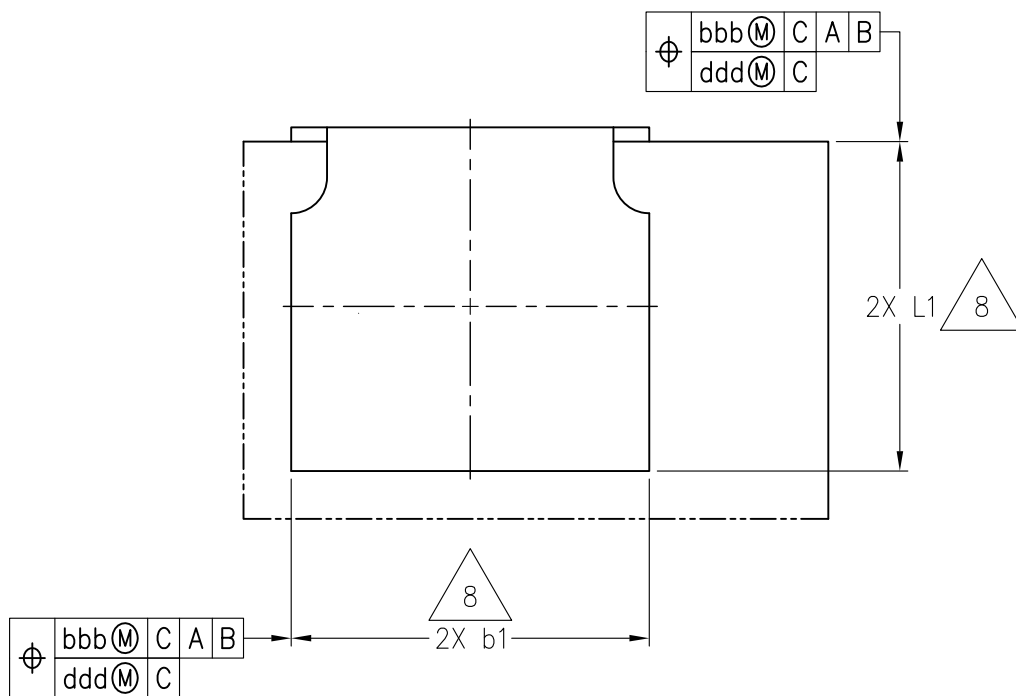
ISSUE
D

DATE
DEC 2023

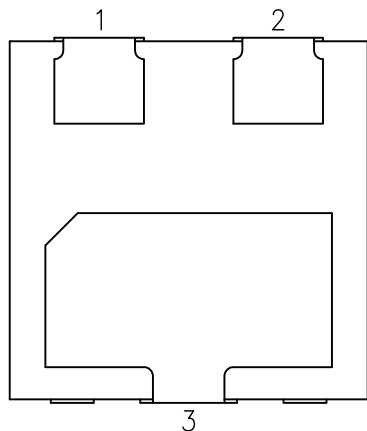
SHEET
1 OF 11



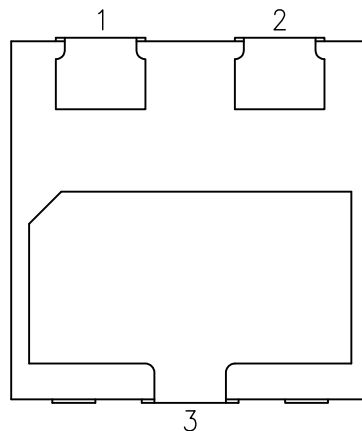
VIEW A-A
(ROTATED 90° CW)



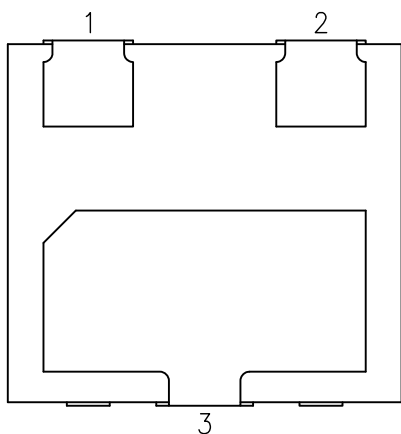
DETAIL B



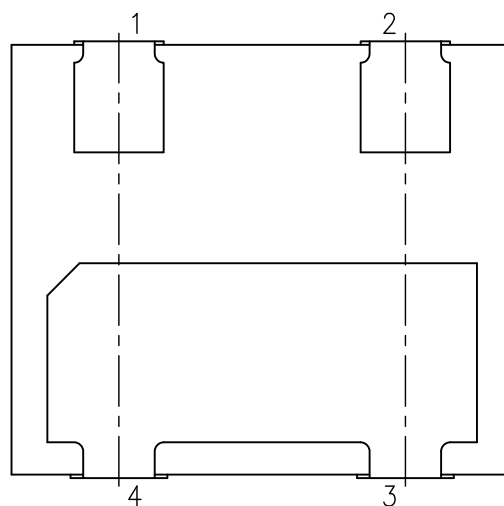
BOTTOM VIEW
VARIATION AA
TERMINAL PATTERN 1



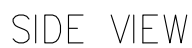
BOTTOM VIEW
VARIATION AB
TERMINAL PATTERN 2

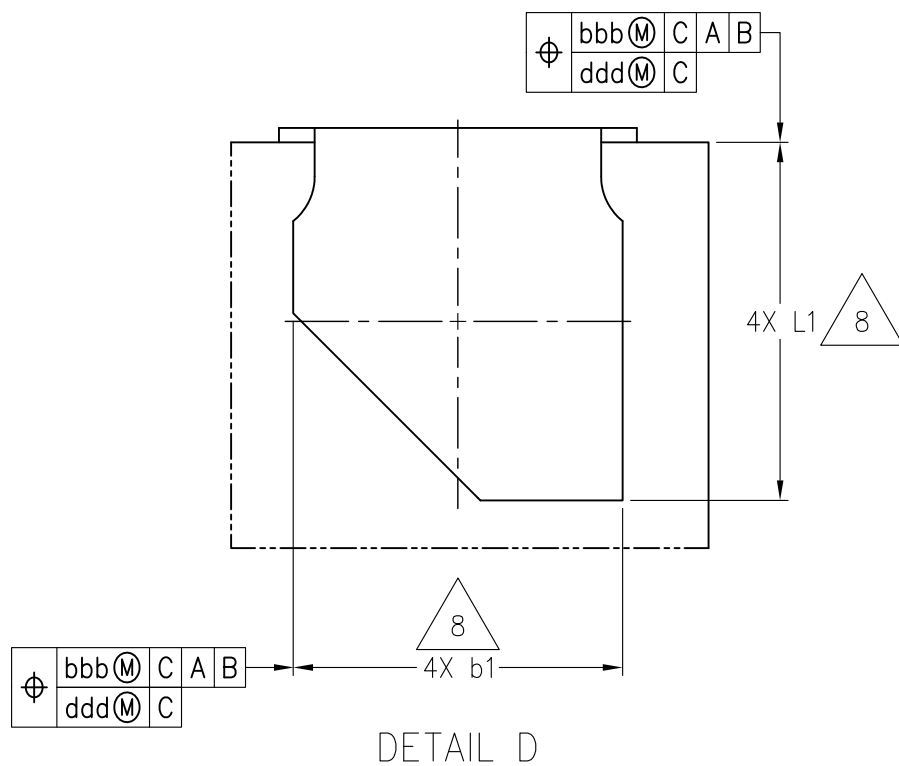
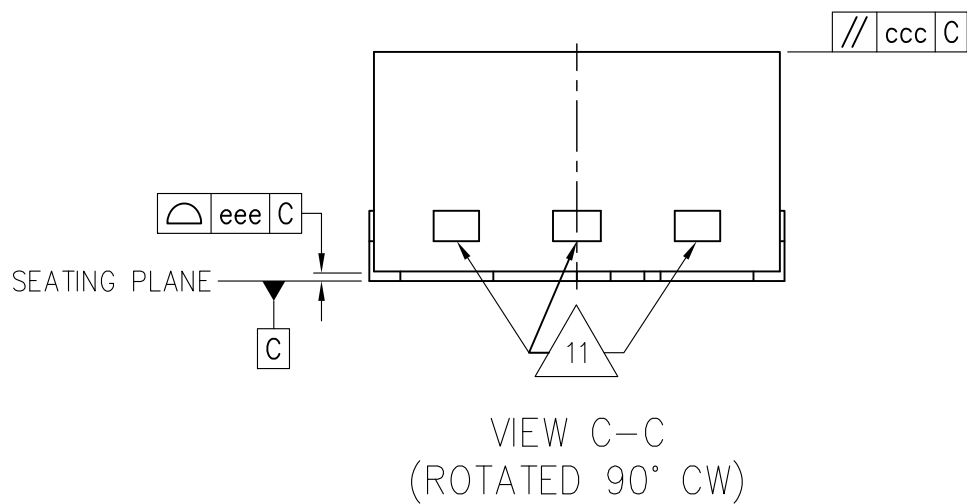


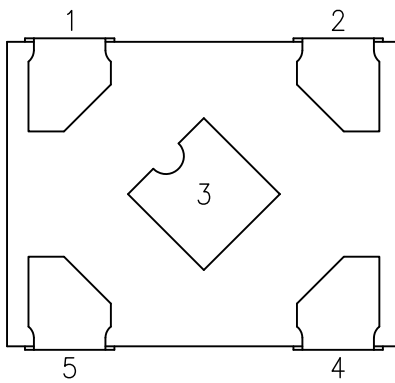
BOTTOM VIEW
VARIATION BA
TERMINAL PATTERN 3



BOTTOM VIEW
VARIATION CA
TERMINAL PATTERN 4







BOTTOM VIEW
VARIATION DA
TERMINAL PATTERN 5

TABLE 1

VARIATIONS							
SYMBOL	AA			AB			
	PDS0–N3_I0p5– R1p0x1p0Z0p53– CturT0p04			PDS0–N3_I0p5– R1p0x1p0Z0p53– CturT0p04–1			
	MIN	NOM	MAX	MIN	NOM	MAX	NOTES
A	0.43	0.48	0.53	0.43	0.48	0.53	5
A1	0.005	0.02	0.04	0.005	0.02	0.04	9
b1	0.22	0.25	0.30	0.22	0.25	0.30	8
b2	0.77	0.80	0.85	0.87	0.90	0.95	8
D	1.00 BSC			1.00 BSC			
E	1.00 BSC			1.00 BSC			
e	0.50 BSC			0.50 BSC			3
e1	0.58 BSC			0.58 BSC			
e2	0.19 BSC			0.17 BSC			
K1	0.20	---	---	0.20	---	---	
K2	---	---	---	---	---	---	
T	0.10	---	---	0.10	---	---	8, 13
L1	0.20	0.23	0.27	0.16	0.19	0.24	8
L2	0.40	0.43	0.48	0.45	0.48	0.53	8
N	3			3			
TERMINAL PATTERN	1			2			
NOTES	1, 2			1, 2			
REF	11–974, 11–994, 11–999			11–974, 11–994, 11–999			
ISSUE	D			D			

TABLE 1 CONTINUED

VARIATIONS							
SYMBOL	BA			CA			
	PDSO–N3_I0p65– R1p1x1p0Z0p53– CturT0p04			PDSO–N3[4]_I0p8 R1p4x1p2Z0p53– CturT0p04			
	MIN	NOM	MAX	MIN	NOM	MAX	NOTES
A	0.43	0.48	0.53	0.43	0.48	0.53	5
A1	0.005	0.02	0.04	0.005	0.02	0.04	9
b1	0.22	0.25	0.3	0.22	0.25	0.30	8
b2	0.87	0.90	0.95	1.17	1.20	1.25	8
D	1.10 BSC			1.40 BSC			
E	1.00 BSC			1.20 BSC			
e	0.65 BSC			0.80 BSC			3
e1	0.58 BSC			0.71 BSC			
e2	0.19 BSC			0.26 BSC			
K1	0.20	---	---	0.25	---	---	
K2	---	---	---	---	---	---	
T	0.10	---	---	0.10	---	---	8, 13
L1	0.20	0.23	0.27	0.27	0.30	0.35	8
L2	0.40	0.43	0.48	0.47	0.50	0.55	8
N	3			4			
TERMINAL PATTERN	3			4			
NOTES	1, 2			1, 2			
REF	11–974, 11–994, 11–999			11–974, 11–994, 11–999			
ISSUE	D			D			

TABLE 1 CONTINUED

VARIATIONS				
SYMBOL	DA			
	PMS0–N5_D0p48 R1p1x0p85Z0p5– CturT0p04			
	MIN	NOM	MAX	NOTES
A	0.44	0.47	0.50	5
A1	0.005	0.02	0.04	9
b1	0.20	0.23	0.28	8
b2	0.27	0.30	0.35	8, 14
D	1.10 BSC			
E	0.85 BSC			
e	0.75 BSC			3
e1	0.60 BSC			
e2	---			
K1	0.20	---	---	
K2	0.45	---	---	
T	0.10	---	---	8, 13
L1	0.22	0.25	0.30	8
L2	---	---	---	
N	5			
TERMINAL PATTERN	5			
NOTES	1, 2			
REF	11–1044			
ISSUE	D			

TABLE 2

TOLERANCES OF FORM AND POSITION		
SYMBOL		NOTES
aaa	0.05	
bbb	0.1	
ccc	0.05	
ddd	0.05	
eee	0.05	
NOTES	1, 2	
REF	11-974	
ISSUE	A	

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5–2009.
2. ALL DIMENSIONS ARE IN MILLIMETERS.
3. "e" REPRESENTS THE TERMINAL GRID PITCH.



1.0 X 1.0 PACKAGE, VARIATION AA, IS SHOWN FOR ILLUSTRATION ONLY.



DIMENSION A INCLUDES STAND-OFF HEIGHT "A1", AND PACKAGE BODY THICKNESS, BUT DOES NOT INCLUDE ATTACHED FEATURES, e.g. EXTERNAL HEATSINK OR CHIP CAPACITORS. AN INTEGRAL HEATSLUG IS NOT CONSIDERED AS ATTACHED FEATURE.



A VISUAL INDEX FEATURE MUST BE LOCATED WITHIN THE HATCHED AREA. THE HATCHED AREA USED IN THIS REGISTRATION IS DEFINED BY A LEGACY METHOD WHICH PERMITS THIS AREA TO TRAVERSE THE ENTIRE WIDTH OF THE COMPONENT AND THEREFORE DOES NOT COMPLY WITH DESIGN GUIDES 4.8, 4.16 & 4.20 WHICH PLACE DIFFERENT RESTRICTIONS ON THE HATCHED AREA. INDEX FEATURES ON THE BOTTOM SURFACE OF THE PACKAGE ARE ALLOWED. TYPICAL FEATURE IS A CHAMFER OR "MOUSE BITE" LOCATED ON THE EDGE OF THE PIN 1 FEATURE.

7. THESE PACKAGES ARE USED PRINCIPALLY FOR DISCRETE DEVICES.



DIMENSION b1, b2, L1, L2, T APPLY TO PLATED TERMINALS.



DIMENSION A1 IS PRIMARILY TERMINAL PLATING, AND DOES NOT INCLUDE SMALL METAL PROTRUSIONS.

10. VARIOUS COMPANIES HAVE ISSUED PATENTS AND RELATED PATENT APPLICATIONS THAT MAY APPLY TO THIS REGISTRATION. IF THE CURRENT ISSUED PATENTS OR LATER PATENTS RESULTING FROM RELATED APPLICATIONS DO APPLY, THESE COMPANIES INTEND TO COMPLY WITH THE JEDEC PATENT POLICY AND LICENSE UNDER REASONABLE TERMS AND CONDITIONS THAT ARE DEMONSTRABLY FREE OF ANY UNFAIR DISCRIMINATION. REFERENCED PATENTS ARE AS FOLLOWS:

NEXPERIA BV	US PATENT NO.: 8809121 B2
-------------	---------------------------



BASED ON CONSTRUCTION METHOD, THE SIDE SURFACES OF THE PACKAGE MAY INCLUDE SOME METALLIZED SUPPORT FEATURES NON-CRITICAL TO THE FUNCTIONALITY OF THE PACKAGE. D VALUE IS INCLUSIVE OF THESE FEATURES.



THE WETTABLE FLANKS CAN HAVE METAL PROTRUSION OF 0.02 MM MAXIMUM AT EACH SIDE. E VALUE IS EXCLUSIVE OF THIS PROTRUSION. THE WIDTH OF WETTABLE FLANK ARE 0.20 MM MINIMUM.



DIMENSION T MAX SHOULD NOT EXCEED DIMENSION A.



NO WETTABLE FLANK AT THIS TERMINAL.

STP (3D) FILE RECORD
3D FILE NAMES MAY EXCEED LENGTH REQUIREMENTS FOR SOME SOFTWARE TOOLS.

STP FILE NAME	DATE	ITEM NUMBER
MO-340B_AA_PDSO-N3_I0p5-R1p0x1p0Z0p53-CturT0p04	JUL 2021	11-994
MO-340B_AB_PDSO-N3_I0p5-R1p0x1p0Z0p53-CturT0p04	JUL 2021	11-994
MO-340B_BA_PDSO-N3_I0p65-R1p1x1p0Z0p53-CturT0p04	JUL 2021	11-994
MO-340B_CA_PDSO-N3[4]_I0p8-R1p4x1p2Z0p53-CturT0p04	JUL 2021	11-994
MO-340D_DA_PDSO-N5_D0p48-R1p1x0p85Z0p5-CturT0p04	DEC 2023	11-1044

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2023 JEDEC	TITLE PLASTIC DUAL SMALL OUTLINE SURFACE TERMINAL, WETTABLE FLANK PACKAGE	NUMBER MO-340	ISSUE D	DATE DEC 2023	SHEET i
--	---	------------------	------------	------------------	------------

TASK GROUP CONTRIBUTORS

NEXPERIA HONG KONG LTD.

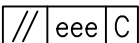
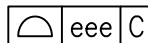
CHANGE RECORD

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: OCTOBER 2019	ITEM NUMBER: 11-974
------------------	--------------------	---------------------

CHANGE RECORD HISTORY:

ISSUE: B	DATE: JULY 2021	ITEM NUMBER: 11-994
----------	-----------------	---------------------

LOCATION	CHANGED FROM:	CHANGED TO:
SHEET 2		
SHEET 4	VARIATION AA: SYMBOL A MIN 0.44, NOM 0.47, MAX 0.50	VARIATION AA: SYMBOL A MIN 0.43, NOM 0.48, MAX 0.53
	VARIATION AB: SYMBOL A MIN 0.44, NOM 0.47, MAX 0.50	VARIATION AB: SYMBOL A MIN 0.43, NOM 0.48, MAX 0.53
	VARIATION AB: e1 0.57 BSC	VARIATION AB: e1 0.58 BSC
	VARIATION AB: e2 0.16 BSC	VARIATION AB: e2 0.17 BSC
SHEET 5	VARIATION BA: SYMBOL A MIN 0.44, NOM 0.47, MAX 0.50	VARIATION BA: SYMBOL A MIN 0.43, NOM 0.48, MAX 0.53
	VARIATION CA: SYMBOL A MIN 0.44, NOM 0.47, MAX 0.50	VARIATION CA: SYMBOL A MIN 0.43, NOM 0.48, MAX 0.53
SHEET 4 & i	PDS0-N3_I0p5- R1p0x1p0Z0p5-CturET0p04	PDS0-N3_I0p5- R1p0x1p0Z0p53-CturET0p04
	PDS0-N3_I0p5- R1p0x1p0Z0p5-CturET0p04-1	PDS0-N3_I0p5- R1p0x1p0Z0p53-CturET0p04-1
	PDS0-N3_I0p65-5 R1p1x1p0Z0p-CturET0p04	PDS0-N3_I0p65- R1p1x1p0Z0p53-CturET0p04
	PDS0-N3[4]_I0p8- R1p4x1p2Z0p5-CturET0p04	PDS0-N3[4]_I0p8- R1p4x1p2Z0p53-CturET0p04

ISSUE: C	DATE: MARCH 2022	ITEM NUMBER: 11-999
----------	------------------	---------------------

LOCATION	CHANGED FROM:	CHANGED TO:
SHEET 1		ADDED NOTE 13 TO DIM 'T'
SHEETS 4 & 5	VARIATION AA/AB/BA/CA SYMBOL T MIN 0.10, NOM 0.16, MAX 0.22	VARIATION AA/AB/BA/CA SYMBOL T MIN 0.10, NOM ---, MAX ---
		ADDED NOTE 13 TO SYM 'T'
SHEET 7		ADDED NOTE 13

JEDEC SOLID STATE PRODUCT OUTLINE Copyright © 2023 JEDEC	TITLE PLASTIC DUAL SMALL OUTLINE SURFACE TERMINAL, WETTABLE FLANK PACKAGE	NUMBER MO-340	ISSUE D	DATE DEC 2023	SHEET iii
--	---	------------------	------------	------------------	--------------

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.

ISSUE:D	DATE:NOVEMBER 2023	ITEM NUMBER:11-1044
---------	--------------------	---------------------

LOCATION	CHANGED FROM:	CHANGED TO:
SHEETS 4-6 & 9		ADDED VARIATION DA: TERMINAL PATTERN 5
SHEET 11		ADDED NOTE 14