



Final Product/Process Change Notification

Document #:FPCN22643XB

Issue Date:28 Dec 2020

Title of Change:	ON Suzhou's DPAK and IPAK Case Outline Change from Non-JEDEC to JEDEC Standard.
Proposed First Ship date:	06 Apr 2021 or earlier if approved by customer
Contact Information:	Contact your local ON Semiconductor Sales Office or Suthakaran.Solamuthu@onsemi.com
PCN Samples Contact:	Contact your local ON Semiconductor Sales Office or <PCN.samples@onsemi.com> . Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or Frank.Tuan@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	Customers may receive the DPAK parts with Jedec once FPCN expires. Jedec parts can be identified through date code marking.
Change Category:	Assembly Change
Change Sub-Category(s):	Shipping/Packaging/Marking

Sites Affected:**ON Semiconductor Sites**

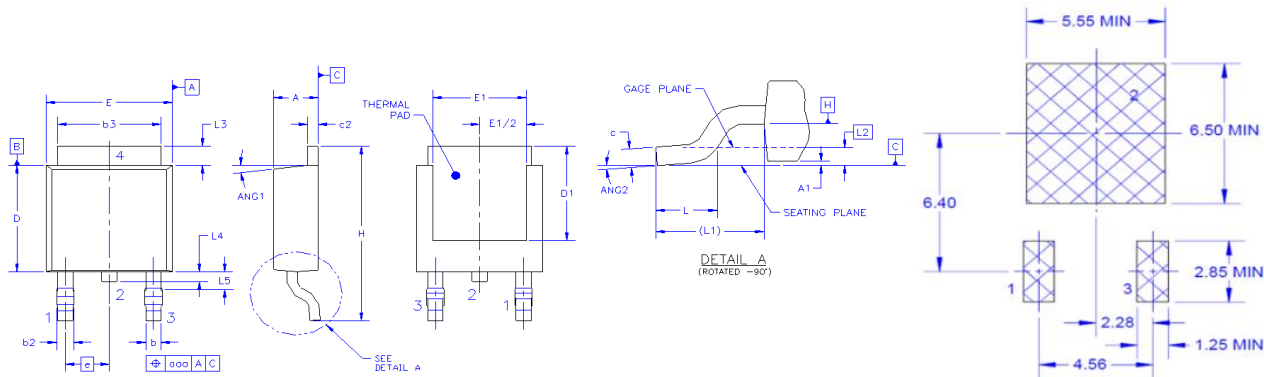
ON Semiconductor Suzhou, China

External Foundry/Subcon Sites

None

Description and Purpose:**Table 1: Old vs New Comparison for DPAK dimension.**

REF	DESCRIPTION	Old Dimension (DPAK NON-JEDEC)			New Dimension (DPAK JEDEC)		
		MIN	NOM	MAX	MIN	NOM	MAX
A	Package thickness	2.20		2.40	2.18	2.29	2.39
A1	Profile height	-0.050		0.20	---		0.127
b	Lead width	0.66	0.76	0.86	0.64	0.77	0.89
b2	Dambar cutting width			0.96	0.76	0.95	1.14
b3	Heat sink width	5.04	5.34	5.64	5.21	5.34	5.46
c	Lead thickness	0.40	0.50	0.60	0.45	0.53	0.61
c2	Heat sink thickness	0.40	0.50	0.60	0.45	0.52	0.58
D	Package length	5.900	6.10	6.30	5.97	6.10	6.22
D1	Back metal length	4.83			5.21		---
E	Package width	6.40	6.60	6.80	6.35	6.54	6.73
E1	Back metal width	5.040	---	5.640	4.32		---
e	Lead pitch	2.08	2.28	2.48	---	2.29	BSC
H	Total package length	9.20	9.50	9.80	9.40	9.91	10.41
L	Foot length	1.40	---	1.70	1.40	1.59	1.78
(L1)	Lead length	2.50	2.70	2.90	2.9ref		
L2	Gage plane	0.490	0.50	0.510	---	0.51	BSE
L3	Heat sink height	0.50		0.90	0.89	1.08	1.27
L4	Center lead cut length	----	----	----	0.64	0.83	1.02
L5	Dambar distance to pkg edge				---	---	---
ANG1	Package draft angle	----	----	----	---	---	---
ANG2	foot landing angle	----	----	----	0.00	---	10.00
aaa	Lead position tolerances	---	---	---	---	---	0.25



There is no product marking change as a result of this change

Reliability Data Summary:

QV DEVICE NAME: MJD50TF
RMS: U65086,U69070,U51911
PACKAGE: TO-252

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta= 150°C, 80% max rated voltage=720V	1000 hrs	0/231
H3TRB	JESD22 A101	85°C, 85% RH, 100V max. 1000 Hours	1000 hrs	0/77
HTGB	JESD22 A108	Tj= 150°C, Vgs=30V	1000 hrs	0/154
TC	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
HAST	JESD22 A110	130°C, 85% RH, 18.8psig, 42V	96 hrs	0/154
RSH	JESD22- B106	Ta = 270°C, 10 sec	10sec	0/90
SD	JSTD002	Ta = 245C, 5 sec	5 sec	0/45

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).

Part Number	Qualification Vehicle
MJD50TF	KSC5502DTM