



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION
Generic Copy

19-OCT-2001

SUBJECT: ON Semiconductor Initial Product/Process Change Notification #11967

TITLE: Initial Notification for DPAK Package Manufactured with a Single Gauge Leadframe Qual at Internal and External

EFFECTIVE DATE: 15-Feb-2002

AFFECTED CHANGE CATEGORY:

**Subcontractor Assembly Site
On Semiconductor Assembly Site**

AFFECTED PRODUCT DIVISION:

**Bipolar Discretes
MOS Power Products Div**

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Mark Wasilewski <RYGF20@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office or Barbara Matteson <RM2230@onsemi.com>

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact Sales Office or Fred Marchesi <RGM520@onsemi.com>

DISCLAIMER:

Initial Product/Process Change Notification (IPCN) -First Notification distributed to customers. Distributed at least 120 days from the effective date of the change.

DESCRIPTION AND PURPOSE:

On Semiconductor would like to notify its customer that to improve quality and cycle time, we are pleased to announce that we qualified a Single Gauge DPAK Leadframe package at our own internal (Seremban, Malaysia) and external (PSI, Manila, Philippines) Assembly/Test site. ON Semiconductor continues to make substantial investments in both new technologies and improved manufacturing capabilities to provide the highest quality and reliability in the semiconductor industry. We believe these actions will also improve our ability to serve you better in the future. The "Z" Dimension, vertical dimension of the backside heatsink, on the package outline, will change from 0.138" to 0.155" min, and now be in compliance with JEDEC T0-252 Case Outline. This IPCN includes Bipolar Power Transistors, TMOS, IGBT's, Rectifiers and Thyristors.

QUALIFICATION PLAN:

MJD18002D2T4-Highest Voltage Bipolar Power Transistor-Largest die
MBRD1035CTLT4-Schottky Rectifier-Largest Die
MCR12DSNT4-Highest Voltage Thyristor-Largest die
MTD32N06L-Largest die



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<u>Test</u>	<u>Conditions</u>	<u>Comments</u>
Preconditioning	MSL-1	Prior to Autoclave and Temp Cycling
HTRB	Tj= Max Rate Tj, 1000 hrs.	
H3TRB	Ta = 85deg.C, rh=85%, Bias = 80% of Max rating, t=1000 hrs.	
IOL	Ta = 25 deg. C, delta Tj = 100 deg C.	
Temp Cycle	Air to Air, -65 to 150 deg. C, 1000 cycles	
HTSL	Ta = 150 deg. C, 1000 hrs.	
Autoclave	Ta = 121 deg. C, RH = 100%. PSig = 15, for 96 hrs	
Resistance to Solder Heat	Per AEC-101	
Solderability	Per AEC-101	
Physical Dimensions	Per Spec	
Parametric Verification	Tri Temp for Auto customers	

AFFECTED DEVICE LIST (WITHOUT SPECIALS):

PART

BUD42D, BUD42D-001, BUD43D2-001, BUD43D2T4, BUD44D2-001, JDX3001T4, JDX3003, JDX3003T4, JDX5011T4, MAC4DCM-001, MAC4DCMT4, MAC4DCN-001, MAC4DCNT4, MAC4DHM-001, MAC4DHMT4, MAC4DLM-001, MAC4DLMT4, MAC4DSM-001, MAC4DSMT4, MAC4DSN-001, MAC4DSNT4, MBRD1035CTL, MBRD1035CTLT4, MBRD320, MBRD320RL, MBRD320T4, MBRD330, MBRD330RL, MBRD330T4, MBRD340, MBRD340RL, MBRD340T4, MBRD350, MBRD350RL, MBRD350T4, MBRD360, MBRD360RL, MBRD360T4, MBRD620CTT4, MBRD630CTT4, MBRD640CT, MBRD640CTT4, MBRD650CT, MBRD650CT1, MBRD650CTT4, MBRD660CT, MBRD660CTRL, MBRD660CTT4, MBRD835L, MBRD835LT4, MCR12DCMT4, MCR12DCN-001, MCR12DCNT4, MCR12DSMT4, MCR12DSN-001, MCR12DSNT4, MCR703ARL, MCR703AT4, MCR704ARL, MCR704AT4, MCR706ARL, MCR706AT4, MCR708A, MCR708A1, MCR708AT4, MCR716T4, MCR718RL, MCR718T4, MCR8DCMT4, MCR8DCNT4, MCR8DSMT4, MCR8DSNT4, MJD112, MJD112-001, MJD112RL, MJD112T4, MJD117, MJD117-001, MJD117T4, MJD122, MJD122T4, MJD127, MJD127T4, MJD128T4, MJD148T4, MJD18002D2T4, MJD200, MJD200-001, MJD200RL, MJD200T4, MJD210, MJD210RL, MJD210T4, MJD243, MJD243-001, MJD243T4, MJD253, MJD253-001, MJD253T4, MJD2955, MJD2955-001, MJD2955T4, MJD3055, MJD3055T4, MJD31C, MJD31C1, MJD31CRL, MJD31CT4, MJD31T4, MJD32C, MJD32C1, MJD32CRL, MJD32CT4, MJD32RL, MJD32T4, MJD340, MJD340RL, MJD340T4, MJD350, MJD350T4, MJD41C1, MJD41CRL, MJD41CT4, MJD42C, MJD42C1, MJD42CRL, MJD42CT4, MJD44E3T4, MJD44H11, MJD44H11-001, MJD44H11RL, MJD44H11T4, MJD44H11T5, MJD45H11, MJD45H11-001, MJD45H11RL, MJD45H11T4, MJD47, MJD47T4, MJD50, MJD50-001, MJD50T4, MJD5731T4, MJD6039T4, MLD1N06CLT4, MLD2N06CL, MLD2N06CLT4, MSRD620CT, MSRD620CTT4, MTD10N10EL, MTD10N10ELT4, MTD12N06EZL, MTD12N06EZLT4, MTD1302, MTD1302-001, MTD1302T4, MTD1312T4, MTD14N10E, MTD14N10E1, MTD14N10ET4, MTD15N06V, MTD15N06V1, MTD15N06VL, MTD15N06VL1, MTD15N06VLT4, MTD15N06VT4, MTD1N50E, MTD1N50E1, MTD1N50ET4, MTD1N60E, MTD1N60E1, MTD1N60ET4, MTD1N80E, MTD1N80E1, MTD1N80ET4, MTD1P40E, MTD1P40E1, MTD1P40ET4, MTD20N03HDL, MTD20N03HDL1, MTD20N03HDLT4, MTD20N06HD, MTD20N06HD1, MTD20N06HDL, MTD20N06HDL1, MTD20N06HDLT4, MTD20N06HDT4, MTD20N06V, MTD20N06VT4, MTD20P03HDL, MTD20P03HDL1, MTD20P03HDLT4, MTD20P06HDL, MTD20P06HDLT4, MTD2955ET4, MTD2955V, MTD2955V1, MTD2955VT4, MTD2N40E, MTD2N40ET4, MTD2N50E, MTD2N50E1, MTD2N50ET4, MTD3055ELT4, MTD3055V, MTD3055V1, MTD3055VL, MTD3055VL1, MTD3055VLT4, MTD3055VT4, MTD3302, MTD3302T4, MTD4N20E, MTD4N20E1, MTD4N20ET4, MTD5P06V, MTD5P06V1, MTD5P06VT4, MTD6N10E, MTD6N10E1, MTD6N10ET4, MTD6N15, MTD6N15T4, MTD6N20E, MTD6N20E1, MTD6N20ET4, MTD6P10E, MTD6P10ET4, MTD9N10E, MTD9N10E1, MTD9N10ET4, MURD305RL, MURD310T4, MURD315T4, MURD320T4, MURD610CTT4, MURD615CTT4, MURD620CT, MURD620CT1, MURD620CTT4, NGD15N41CLT4,

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NTD12N10, NTD12N10-001, NTD12N10T4, NTD15N06, NTD15N06-001, NTD15N06L,
NTD15N06L-001, NTD15N06LT4, NTD15N06T4, NTD18N06, NTD18N06-001,
NTD18N06L, NTD18N06L-001, NTD18N06LT4, NTD18N06T4, NTD20N03L27,
NTD20N03L27-001, NTD20N03L27T4, NTD20N06, NTD20N06-001, NTD20N06L,
NTD20N06L-001, NTD20N06LT4, NTD20N06T4, NTD24N06, NTD24N06-001, NTD24N06L,
NTD24N06L-001, NTD24N06LT4, NTD24N06T4, NTD3055-094, NTD3055-094-1,
NTD3055-094T4, NTD3055-150, NTD3055-150-1, NTD3055-150T4, NTD3055AVLT4,
NTD3055L104, NTD3055L104-001, NTD3055L104T4, NTD3055L170, NTD3055L170-001,
NTD3055L170T4, NTD32N06, NTD32N06-001, NTD32N06L, NTD32N06L-001,
NTD32N06LT4, NTD32N06T4, NTD4302, NTD4302-001, NTD4302T4, NTD4N60, NTD4N60-001,
NTD4N60T4, NTD5N50, NTD5N50-001, NTD5N50T4, NTD60N03, NTD60N03T4, NTD6N40,
NTD6N40-001, NTD6N40T4, SBRD81035CTLT4, SBRD8340T4, SBRD8360T4, SBRD8835LT4,
SJD31CT4, STD2N50ET4, STD3055VL, STD3055VL1, STD3055VLT4, STD3055VT4,
STD4302-011, STD5P06VT4, SURD8320T4, XBRD3100