ON Semiconductor



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20498

Generic Copy

Issue Date: 03-Jul-2014

TITLE: Cover Tape Material Change from Heat Seal to Cold Seal for Die Sales Products

PROPOSED FIRST SHIP DATE: 03-Oct-2014

AFFECTED CHANGE CATEGORY(S): Packing

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or <<u>todd.manes@onsemi.com</u>>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or <<u>todd.manes@onsemi.com</u>>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change unless approved earlier by customers.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor is pleased to announce the qualification of Cold Seal cover tape (3M part number UCT 2688A) for die sales products sold in Tape and Reel. Currently, these products are shipped in Tape and Reel with Heat Seal cover tape. This change is being made as part of ON Semiconductor's ongoing quality optimization efforts. The change to Cold Seal cover tape reduces the risk of die sticking to the cover tape.



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20498

	Before	After
Supplier	3M	3M
Part #	2675	UCT 2688A
Туре	Heat Seal	Cold Seal
	(a) Cover tape fully peel off from carrier tape(b) Cover tape with heat activated adhesive.	 (a) Tearing effect on center of cover tape (b) Zero adhesive (c) Sealing path (left and right) remain on carrier tape, no glue transfer to customer machine / unit
		(a) (b) (c)

RELIABILITY DATA SUMMARY:

Reliability Test Results:

Qualification testing included the following:

Die Sticking to Cover Tape (Test = Pull Test following 90degC oven bake for 3 hours) on 150 units of each of 2 device types.

No die sticking to cover tape observed

Aging Test at Hot, Room, and Cold (Test = Peeling Strength @ 52degC, +25degC, -18degC up to 30 days) on 3 full reels.

Peel Strength within specification; no torn cover tape during peeling.

Peel Strength (Test = Peel Strength on Corner Matrix with Sealing Force and Sealing Time varied) on 300mm/leg

Peel Strength remained in spec with no significant variation across all conditions.

ELECTRICAL CHARACTERISTIC SUMMARY:

No impact to electrical performance.

CHANGED PART IDENTIFICATION:

Date codes 2014 week 35 or later will use Cold Seal tape. Note that the implementation date code may be earlier for certain parts if customer approval is received before the FPCN expiration date. In any such cases, the implementation date code will be communicated to the customer.

ON Semiconductor



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20498

List of affected General Parts:

ESD11N5.0ST5G	NCP435FCT2G	NCP6924AFCHT1G
NSR05F30NXT5G	NCP436FCT2G	NCP6924BFCHT1G
NSR01F30NXT5G	NCP437FCT2G	NCP6924CFCHT1G
NSR20F20NXT5G	NCP439FCT2G	NCP6925AFCT1G
NSR20F30NXT5G	NCP451FCT2G	NCT218FCT2G
NCP1751FCCT1G	NCP456RFCT2G	NLAS4717EPFCT1G
NCP1850FCCT1G	NCP457FCT2G	NLAS4717FCT1G
NCP1851BFCCT1G	NCP458RFCT2G	NLSX0102FCT1G
NCP1854FCCT1G	NCP460RFCT2G	NLSX0102FCT2G
NCP335FCT2G	NCP461FCT2G	NLSX3378FCT1G
NCP337FCT2G	NCP6343BFCCT1G	NLSX4378BFCT1G
NCP391FCALT2G	NCP6343FCT1G	TCC-103A-RT
NCP432FCT2G	NCP6865DUMFCT1G	TCC-106A-RT
NCP433FCT2G	NCP6924AFCET1G	