

Final Product/Process Change Notification

Document #:FPCN22647XAN Issue Date:27 Mar 2020

Title of Change:	EMC Change for the devices which use Samsung SDI EMC for TO220F (Non-SF3).		
Proposed First Ship date:	04 Jul 2020 or earlier if approved by customer		
Contact Information:	Contact your local ON Semiconductor Sales Office or David.Zhu@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 <u>Lake.Wang@onsemi.com</u>		
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:	Product with date code 2027 or newer will be assembled with the new mold compound.		
Change Category:	Assembly Change		
Change Sub-Category(s):	Material Change		
ites Affected:			
ON Semiconductor Sites		External Foundry/Subcon Sites	
ON Semiconductor Suzhou, China		None	

Description and Purpose:

ON Semiconductor wishes to inform our customers of a change in mold compounds used for the devices listed in this PCN.

This change is a result of an End of Life notification received from Samsung for several of their SDI Mold Compounds.

At the expiration of this PCN, the impacted products will use the new mold compound or the existing mold compound until all inventories are consumed.

All other aspects of the impacted products will remain unchanged.

	Before Change Description	After Change Description	
Mold Compound	SG8300HK; Supplier: Samsung SDI	KTMC3097GXA; Supplier: KCC	

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

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Reliability Data Summary:

QV DEVICE NAME : FDPF8N50NZU RMS : U58319 PACKAGE : TO220F

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta = 150°C, 80% rated V	1008 hrs	0/77
HTGB	JESD22-A108	Ta= 150 °C, 100% rated Vgss	1008 hrs	0/77
HTSL	JESD22-A103	Ta = 150°C	1008 hrs	0/77
TC	JESD22-A104	Ta = -55°C to +150°C	1000 cyc	0/77
HAST	JESD22 A110	Temp= +110°C, RH=85%, bias=80% of rated BV or max 100Vdc	264 hrs	0/77
RSH	JESD22 B106	Ta=265°C 10 sec dwell		0/10
SD	JESD22 B102	Ta=245°C 5 sec dwell		0/15
ED		Tri-Temperature, Per 48A		0/30
TR		Provide thermal comparison data to ensure spec compliance		0/10
PD		Per Case Outline		0/10

All reliability result passed.

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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle	
FFPF20UP40S	FDPF8N50NZU	

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Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
FFPF20UP40S		FDPF8N50NZU		