ON Semiconductor®

Final Product/Process Change Notification

Document # : FPCN22647XM
Issue Date: 2 October 2019

Title of Change:	Mold compound change due to End of Life of Samsung SDI molding compound in TO220F package
Proposed first ship date:	9 January 2020
Contact information:	Contact your local ON Semiconductor Sales Office or <yuna.im@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office or <yuna.im@onsemi.com> Sample requests are to be submitted no later than 30 days from the date of first notification, IPCN 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 <Lake.Wang@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>
Change Part Identification:	Product with date code 1948 or newer will be assembled with a new mold compound.
Change Category:	☐ Wafer Fab Change ☑ Assembly Change ☐ Test Change ☐ Other ____________

Change Sub-Category(s):

☐ Manufacturing Site Addition
☐ Manufacturing Site Transfer
☐ Manufacturing Process Change

☑ Material Change
☐ Product specific change

☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: ____________________________

Sites Affected:	ON Semiconductor Sites: ON Suzhou, China	External Foundry/Subcon Sites: 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 is the final product change notification (FPCN) of IPCN22647. This change is a result of an End of Life notification received from Samsung for several of their SDI Mold Compounds. Due to the discontinuance of the SDI mold compounds, ON Semiconductor will only have limited supplies of the existing material and in some cases this may not allow for the normal change notification period. All other aspects of the impacted products (form, fit, function) will remain unchanged.

	Before Proposed Change	**After Proposed Change**
Mold Compound	SG8300HK; Supplier: Samsung SDI	KTMC3097GXA

Reliability Data Summary:

QV DEVICE NAME: FCPF067N65S3
RMS: U59674
PACKAGE: TO220F

Test	Specification	Test Conditions	Interval	Results
HTRB	JESD22-A108	TA = 150°C for 1008 hours, 100% rated	1008 hrs	0/77
HTGB	JESD22-A108	TA = 150°C temperature for 1008 hrs, 100% rated Vgs	1008 hrs	0/77
HTSL	JESD22-A103	TA = 150°C for 1008 hours	1008 hrs	0/77
TC	JESD22-A104	Temp = -55°C to +150°C; for 1000 cycles	1000 cyc	0/77
HAST	JESD22 A110	Temp= +130°C, RH=85% , p = 18.8 psig, bias=80% of rated BV or max 100Vdc	96 hrs	0/77
RSH	JESD22-B106	Ta=265°C 10 sec dwell	10s	0/10
SD	J STD 002	Ta=245C 5 sec dwell	5s	0/15
Tri-temp		Tri-Temp Characterization, Per 48A		0/30
TR		Thermal Resistance		0/10
PD		Per Case Outline		0/10

Electrical Characteristic 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
FCPF067N65S3	FCPF067N65S3
FCPF099N65S3	FCPF067N65S3
FCPF125N65S3	FCPF067N65S3