

Final Product/Process Change Notification Document #:FPCN25566X

Issue Date:26 Sep 2023

Title of Change:	Transfer of Assembly and Test operations of the selected TO3PF IGBT parts, outsource from onsemi Suzhou to Good-Ark China		
Proposed First Ship date:	31 Dec 2023 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or <u>TieJun.Ding@onsemi.com</u>		
PCN Samples Contact:	Contact your local onsemi Sales Office. 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 onsemi Sales Office or Harper.Pan@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. onsemi 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:	The traceability of marking will be maintained by assembly plant code, lot code and date code		
Change Category:	Assembly Change, Test Change		
Change Sub-Category(s):	Manufacturing Site Transfer, Material Change		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
None		Good-Ark, China	

Description and Purpose:

This FPCN is to inform customers of the transfer of TO3PF IGBT products to new assembly and test site Good-Ark, China.

For assembly changes:

	From	То	
Assembly & Final Test Sites	Onsemi Suzhou	Good-Ark,China	
Die Attach	PB93.5SN5AG1.5 PB92.5SN5AG2.5		

	From	То
Product marking change	Existing Line 1: Internal traceability	Corporate marking style Line 1 & Line 2: device marking
	Line 2 & Line 3: device marking	Line 3: Internal traceability (AYWWZZ)

TEM001793 Rev. F Page 1 of 2



Final Product/Process Change Notification

Document #:FPCN25566X Issue Date:26 Sep 2023

Reliability Data Summary:

QV DEVICE NAME: FGAF40N60SMD

PACKAGE: <u>TO-3PF</u> RMS: <u>U86807</u>

Test	Specification	Condition	Interval	Result
High Temperature Reverse Bias	JESD22-A108	Ta=175°C, 80% max rated V	1008 hrs	0/77
High Temperature Gate Bias	JESD22-A108	Ta=175°C, 100% max rated Vgss	1008 hrs	0/77
High Temperature Storage Life	JESD22-A103	Ta=175°C	1008 hrs	0/77
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
High Humidity High Temperature Reverse Bias Test	JESD22-A101	85°C, 85% RH, 18.8psig, bias	96 hrs	0/77
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/77
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec Required for through hole devices only	end points	0/30
Solderability	JSTD002	Ta = 245°C, 5 sec	end points	0/15
Lead integrity	JESD22-B105	Lead Tension test for 10pcs units. Lead Bending test for 10pcs units. Lead Fatigue test for 10pcs units.	end points	0/30

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	
FGAF40N60SMD	FGAF40N60SMD	
FGAF40N60UFTU	FGAF40N60SMD	

TEM001793 Rev. F Page 2 of 2