

Final Product/Process Change Notification Document #:FPCN25004X

Issue Date: 29 May 2023

Title of Change:	Mold Compound change from EME6600CS S4L to KTMC1050GFA in SHEDCL.		
Proposed First Ship date:	30 Dec 2023 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or <u>Huan.Tran@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 <u>Lalan.Ortega@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. 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:	Identify by Lot code.		
Change Category:	Assembly Change		
Change Sub-Category(s):	Material Change		
Sites Affected:	Sites Affected:		
onsemi Sites		External Foundry/Subcon Sites	
None		SHANTOU HUASHAN Electronic Devices Co., Ltd., China	
Category: Gub-Category(s): ected:	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 Identify by Lot code. Assembly Change Material Change External Foundry/Subcon Sites		

Description and Purpose:

onsemi wishes to inform customer of a change in mold compound used for the devices listed in this PCN due to potential end of life of current mold compound EME6600CS S4L by end of 2023. There is no product marking change as a result of this change.

	From	То	
Mold Compound	EME6600CS S4L, SUMITOMO	KTMC1050GFA, KCC	

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Final Product/Process Change Notification

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Reliability Data Summary:

QV DEIVCE NAME HGTG40N60A4 RMS: U80814, O81495, V81497, U85951

PACKAGE: TO-247-3

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0 / 231
High Temperature Gate Bias	JESD22-A108	Ta=150°C, 100% max rated Vgss	1008 hrs	0 / 231
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0 / 231
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C 6000 cyc		0 / 120
		On/off = 5.0 mins		
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0 / 231
High Humidity, High Temperature Reverse Bias	JEDS22 A101	Ta = 85°C, 85% RH, bias	1008 hrs	0 / 231
Unbiased Highly Accelerated Stress Test	JESD22-A118	Ta = 130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 231
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec		0.700
		Required for through hole devices only		0 / 90
Solderability	JSTD002	Ta = 245°C, 5 sec		0 / 45
Physical Dimensions	JESD22-B120	Case outline 340CK		0/30
Electrical Distribution		Tri- Temp Characterization		0 / 90

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	
FGH40N60SFDTU	HGTG40N60A4	
FGH20N60SFDTU	HGTG40N60A4	

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