Final Product/Process Change Notification

Document #:FPCN26157X
Issue Date:13 Jun 2024

Title of Change:	Qualification of Leadframe design change and mold compound change for SOD-123FL.
Proposed First Ship date:	20 Sep 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or NurulAqilah.AbuHurairah@onsemi.com
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 ChangKit.Mok@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:	Changed material can be identified by date or lot code
Change Category:	Assembly Change
Change Sub-Category(s):	Manufacturing Process Change

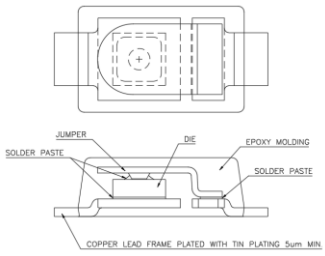
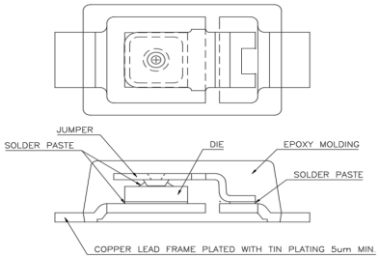
Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	PANJIT Electronics (Wuxi) Co., Ltd., China

Description and Purpose:

This Final Product Change Notification is to advise customers of the leadframe design and mold compound change for the SOD-123FL devices listed in this notification.

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

	From	**To**
Leadframe design		
Mold compound	ELER-8-500C	EME-G600FL

Reliability Data Summary:

QV DEVICE NAME : PZ1AL15B
RMS : PJ-QA2312034
PACKAGE : SOD123FL

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=140°C, 80% max rated V	1008 hrs	0/77
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, HAST & Autoclave for surface mount pkgs only	-	0/308
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off =2 min	15,000 cyc	0/77
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/77
Autoclave	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec	-	0/30
Solderability	JSTD002	Ta = 245°C, 5 sec	-	0/10
Physical Dimensions	JESD22-B120	-	-	0/10

QV DEVICE NAME : SS20100FL-AU
RMS : PJ-QA2312030
PACKAGE : SOD123FL

Test	Specification	Condition	Interval	Results
High Temperature Reverse Bias	JESD22-A108	Ta=100°C, 80% max rated V	1008 hrs	0/77
High Temperature Storage Life	JESD22-A103	Ta=150°C	1008 hrs	0/77
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre IOL, TC, H3TRB and Autoclave for surface mount pkgs only	-	0/308
Intermittent Operating Life	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off =2 min	15,000 cyc	0/77
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/77
High Humidity High Temperature Reverse Bias	JESD22-A101	85°C/85% RH, 80% rated or 100V max	1008 hrs	0/77
Autoclave	JESD22-A102	121°C, 100% RH, 15psig, unbiased	96 hrs	0/77
Resistance to Solder Heat	JESD22- B106	Ta = 265°C, 10 sec	-	0/30
Solderability	JSTD002	Ta = 245°C, 5 sec	-	0/10
Physical Dimensions	JESD22-B120	-	-	0/10

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* ***PCN Customized Portal****.*

Part Number	Qualification Vehicle
SS26FL	PZ1AL15B, SS20100FL-AU
SS24FL	PZ1AL15B, SS20100FL-AU