Final Product/Process Change Notification

Document #:FPCN23354X
Issue Date:12 Jan 2022

Title of Change:	Copper wire conversion for SOD123 switching diodes, wire from 0.8 mil Au wire to 0.8mil Pd doped Cu wire.
Proposed First Ship date:	02 May 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Andy.Tao@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 c.l.yang@lps.com.cn
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:	At the expiration of this PCN devices will be assembled with 0.8mil Pd doped copper wire at onsemi existing Leshan facility. Products assembled with 0.8mil Pd doped Cu wire from the onsemi facility will have a Finish Goods Date Code of WW17' 2022 or greater.
Change Category:	Assembly Change
Change Sub-Category(s):	Material Change

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
Leshan Phoenix Semiconductor, China	None

Description and Purpose:

onsemi is notifying customers of its use of 0.8 mils Pd doped Cu wire for SOD123 switching Diode at onsemi Leshan, China facility.

Upon the expiration of this PCN, these devices will be built with 0.8 mils Pd doped Cu wire.

Datasheet specifications and product electrical performance remain unchanged.

Reliability Qualification and full electrical characterization over temperature has been performed

	Before Change Description	**After Change Description**
Bonding Wire	0.8 mil Au wire	0.8 mil Pd doped Cu wire

Reliability Data Summary:

QV DEVICE NAME: SMMSD701T1G; SZMMSZ5254ET1G
RMS: L70379, L70378
PACKAGE: SOD123

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta=Max rate Tj , 100% max rated V	1008hrs	0/231
HTGB	JESD22-A108	Ta=Max rate Tj, 100% max rated Vgss	1008hrs	0/231
HTSL	JESD22-A103	Ta=Max rate storage temp	2016hrs	0/231
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2min	30000cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C	1000cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/30
SD	JSTD002	Ta = 245C, 5 sec		0/30

QV DEVICE NAME: SMMSD103T1G
RMS: L70381
PACKAGE: SOD123

Test	Specification	Condition	Interval	Result
HTRB	JESD22-A108	Ta=Max rate Tj , 100% max rated V	1008hrs	0/231

Electrical Characteristics Summary:

Three temperature characterization and ESD performance meet datasheet specification. Electrical characterization result is available upon request.

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
MMSD914T1G	SMMSD701T1G; SZMMSZ5254ET1G; SMMSD103T1G
MMSD914T3G	SMMSD701T1G; SZMMSZ5254ET1G; SMMSD103T1G