



Final Product/Process Change Notification

Document #:FPCN24680X

Issue Date:19 Sep 2022

Title of Change:	Pd-coated Cu wire qualification on SC74 transistor and Bias Resistor Transistor at onsemi Leshan, China facility.	
Proposed First Ship date:	26 Dec 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:	Changed material will be identified by date code	
Change Category:	Assembly Change	
Change Sub-Category(s):	Material Change	
Sites Affected:		
onsemi Sites	External Foundry/Subcon Sites	
onsemi Leshan, China	None	
Description and Purpose:		
onsemi is notifying customers of its use of 0.8 mils Pd-coated Cu wire for transistor devices assembled in SC74 at onsemi Leshan, China facility.		
Upon the expiration of this PCN, these devices will be built with 0.8 mils Pd-coated Cu wire		
Datasheet specifications and product electrical performance remain unchanged.		
Reliability Qualification and full electrical characterization over temperature have been performed.		
	Before Change Description	After Change Description
Bond Wire	0.8 mils bare Cu wire	0.8 mils Pd-coated Cu wire
There is no product marking change as a result of this change.		

Reliability Data Summary:

QV DEVICE NAME: SMBT2001T1G/ SMBT2002T1G

RMS#:84630/84694

PACKAGE: SC74

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	2016 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	2016 hrs	0/231
IOL	MIL-STD-750 Method 1037	Ta=+25°C, delta Tj=100°C On/off = 2 min	30K cyc	0/231
TC	JESD22-A104	Ta= -65°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	110°C, 85% RH, 3psig, bias	528 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	-	
RSH	JESD22- B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 5 sec	-	0/30

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
HN1B01FDW1T1G	SMBT2002T1G

Appendix A: Changed Products

PCN#: FPCN24680X
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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
HN1B01FDW1T1G		SMBT2002T1G		