



## Final Product/Process Change Notification

Document #:FPCN25207X

Issue Date:22 May 2024

<b>Title of Change:</b>	SOT23 Low VCEsat transistors wire, mold compound and top metal change.	
<b>Proposed First Ship date:</b>	29 Aug 2024 or earlier if approved by customer	
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:BernardRajVellangani.Pelevindran@onsemi.com">BernardRajVellangani.Pelevindran@onsemi.com</a>	
<b>PCN Samples Contact:</b>	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.	
<b>Additional Reliability Data:</b>	Contact your local onsemi Sales Office or <a href="mailto:ChangKit.Mok@onsemi.com">ChangKit.Mok@onsemi.com</a>	
<b>Type of Notification:</b>	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 <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a>	
<b>Marking of Parts/ Traceability of Change:</b>	Changed material can be identified by date code	
<b>Change Category:</b>	Assembly Change, Wafer Fab Change	
<b>Change Sub-Category(s):</b>	Material Change	
<b>Sites Affected:</b>		
<b>onsemi Sites</b>	<b>External Foundry/Subcon Sites</b>	
onsemi Leshan, China	None	
onsemi, ISMF Malaysia		
<b>Description and Purpose:</b>		
This final notification is to notify customers of the qualification of 2 mil bare Cu wire for SOT23 Low VCEsat transistor devices at onsemi Leshan, China facility, while changing the mold compound from Hitachi G200F/Hysol GR640HV to Sumitomo G700LS and changing top metal from 20KA AISi to 20KA AISi with oxide island under emitter.		
	<b>Before Change Description</b>	<b>After Change Description</b>
<b>Bond Wire</b>	2 mil Au wire	2mi bare Cu wire
<b>Mold compound</b>	Hitachi G200F/Hysol GR640HV	Sumitomo G700LS
<b>Top metal</b>	20KA AISi	20KA AISi+ oxide island under emitter



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### Reliability Data Summary:

QV: NSV1C201LT1G

RMS#: 92841

Package: SOT23

Test	Specification	Condition	Interval	Result
PC	JESD22-A113	MSL 1 @ 260 °C	Before TC, UHAST, HAST, IOL	0/924
UHAST	JESD22-A118	130C/85%RH, ~18.8 psig, no bias	96 hrs	0/231
TC	JESD22-A104	Ta = - 65°C to +150°C	1000 cyc	0/231
HAST	JESD22-A110	110°C, 85% RH, V=80% rated V or to a voltage arching may occur	264 hrs	0/231
HTRB	JESD22- A108	Tj= max, V=100% rated V, 1008 Hrs	1008 hrs	0/231
HTSL	JESD22- A103	Temp.=150°C	1008 hrs	0/231
IOL	MIL-STD-750 Method 1037	Ta=25C DeltaTj=100C°, t(on)=t(off)= 2 min	15k cyc	0/231
RSH	JESD22-B106	Ta = 265C, 10 sec	-	0/30
SD	JSTD002	Ta = 245C, 10 sec	-	0/30

### 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
NSS1C201LT1G	NSV1C201LT1G
NSS20201LT1G	NSV1C201LT1G
NSS40201LT1G	NSV1C201LT1G
NSS60201LT1G	NSV1C201LT1G