

PROCESS CHANGE NOTIFICATION

Change soft solder for certain TO263 products

PCN #

CN-00417A

Dear Valued Customer,

This Product Change Notification (PCN) contains advance information about changes we are planning to make to products that you have purchased within the last two years.

To unify the soft solder material and enhance the products' ruggedness, we had qualified Heraeus' soft solder PbSn5Ag1.5 and will replace current Heraeus' soft solder PbSn10 for certain TO263 products. The affected products are listed in the appendix. The form, fit, function, quality and reliability of our products will not be affected in any way with this change.

Please acknowledge receipt of this PCN within 30 days by signing in at <http://www.aosmd.com/quality/pcn> or sending the enclosed Acknowledgement Form to your local AOS Sales Representative.

Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.

If you have any questions regarding this change notice, please contact your local AOS Sales Representative.

<http://www.aosmd.com/contact>

Sincerely,

CK OH

Vice President of Quality

Alpha and Omega Semiconductor

Process Change Notification

PRODUCT CATEGORY MOSFET/IGBT	PRODUCT(S) AFFECTED Please refer the affected part list at the end of this PCN. * This PCN extends to all new related products that may be released after this PCN.		
TYPE OF CHANGE Soft solder material			
DESCRIPTION OF CHANGE Original Soft solder is PbSn10 from Heraeus. New Soft solder is PbSn5Ag1.5 from Heraeus.			
REASON FOR CHANGE To unify the soft solder material and enhance the products' ruggedness.			
SAMPLE AVAILABILITY See appendix (To obtain samples or production devices, please contact your AOS Sales Representative).	FIRST SHIP DATE Estimated to be from Sep, 22th, 2019, or earlier upon customer approval.		
METHOD OF IDENTIFICATION Estimated to start from Date Code: '19Z'.			
IMPACT OF CHANGE Form: None Fit: None Function: None Reliability: None Environment: None			
QUALIFICATION / RELIABILITY DATA: a) Reliability Qualification :			
Reliability test			
Test Item	Condition	Time Point	Sample Size
HTGB	T=150°C Vgs=100%Vgsmax	1000 hours	77*3
HTRB	T=150°C Vds=80%Vdsmax	1000 hours	77*3
Solder reflow precondition	MSL soak + 3cycle reflow@ 260°C	-	77*9
TC	-65(+0/-10)°C to +150(+15/-0)°C air to air; 30mins/cycle (preferred)	1000 cycles	77*3

HAST	130(±2)°C, 85(±5)%RH, 33.3psia, Vds=80%Vdsmax before arcing (typically ≤42V)	96hours	77*3
PCT	121(±2)°C, 29.7psia, RH=100%	96hours	77*3

PCN RESPONSE:

Please acknowledge receipt of this PCN within 30 days of delivery
 Lack of acknowledgement of the PCN within 30 days constitutes acceptance of the change.

AOS CONTACTS:

Please contact your local AOS Sales Representative
<http://www.aosmd.com/contact/>

Acknowledgement of Process Change Notification

(Filled by the customer)

Confirming the Receipt of the PCN

PCN #:

Receiving date (YY/MM/DD):

Receiver:

Department / Title of the receiver:

Signature / Stamp:

Customer Request

Sample request

Quantity:

Requirement of qualification data:

Approval of the Change

Approve

Disapprove

Reason of disapproval:

Approver:

Department / Title of the approver:

Signature / stamp:

QRU-00022-02(d)

Appendix: Affected Product List

Part number	Estimated sample available date	Estimated completion date of qualification	Remark
AOB10B60D	Contact Sales	Completed	
AOB10B65M1	Contact Sales	Completed	
AOB15B60D	Contact Sales	Completed	
AOB15B65M1	Contact Sales	Completed	
AOB20B65M1	Contact Sales	Completed	
AOB2140L	Contact Sales	Completed	
AOB2144L	Contact Sales	Completed	
AOB2618L	Contact Sales	Completed	
AOB288L	Contact Sales	Completed	
AOB2904	Contact Sales	Completed	
AOB5B60D	Contact Sales	Completed	
AOB5B65M1	Contact Sales	Completed	
AOB66460L	Contact Sales	Completed	
AOB66464L	Contact Sales	Completed	