

**TITLE: Product/Process Change Notice - Molding Compounds Change for Multiple Products in TO220(F) & TO262F package (Phase II)**
**RELEASE DATE: 2020-10-03**
**OWNER DEPARTMENT: Product & Test**
**REVISION HISTORY**

(The original approval sheet is kept in DCC)

REVISION	RELEASE DATE	AUTHOR	DESCRIPTION OF CHANGES
A	2020-10-03	Yuye Cao	original

## PROCESS CHANGE NOTIFICATION

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**Molding Compounds Change for Multiple  
Products in TO220(F) & TO262F package  
(Phase II)**

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PCN #

CN-00438A

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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.

Due to the discontinuation of the supply of molding compounds from Samsung SDI Co., Ltd, Alpha & Omega Semiconductor has qualified new molding compounds from Panasonic Industrial Devices Materials (Shanghai) Co., Ltd., KCC Corporation and SD materials (Suzhou) Co., Ltd (original Hitachi Chemical (Suzhou) Co., Ltd) for TO220, TO220F & TO262F package to avoid supplying shortage. The transition of the molding compound is planned in several phases. The affected products in phase II 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,

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Vice President of Quality

Alpha and Omega Semiconductor

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## Process Change Notification

<b>PRODUCT CATEGORY</b>  MOSFET	<b>PRODUCT(S) AFFECTED</b> Please refer the affected part list at the end of this PCN. * This PCN extends to all related products that may be released after this PCN.																				
<b>TYPE OF CHANGE</b>  Molding compound change																					
<b>DESCRIPTION OF CHANGE</b>  Change the molding compound supplier from Samsung SDI to Panasonic, KCC and SD (original Hitachi). For details, please contact your local AOS sales representatives.																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Package</th> <th colspan="2">Original</th> <th colspan="2">New</th> </tr> <tr> <th>Supplier</th> <th>Type</th> <th>Supplier</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td rowspan="2">TO220F/TO262F</td> <td rowspan="2">Samsung SDI</td> <td>Pb Free Type</td> <td rowspan="2">1. Panasonic 2. KCC</td> <td rowspan="4">Halogen Free type (Green compound)</td> </tr> <tr> <td>Halogen Free type (Green compound)</td> </tr> <tr> <td rowspan="2">TO220</td> <td rowspan="2">Samsung SDI</td> <td>Pb Free Type</td> <td rowspan="2">1. SD (original Hitachi) 2. KCC</td> </tr> <tr> <td></td> </tr> </tbody> </table>		Package	Original		New		Supplier	Type	Supplier	Type	TO220F/TO262F	Samsung SDI	Pb Free Type	1. Panasonic 2. KCC	Halogen Free type (Green compound)	Halogen Free type (Green compound)	TO220	Samsung SDI	Pb Free Type	1. SD (original Hitachi) 2. KCC	
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TO220	Samsung SDI	Pb Free Type	1. SD (original Hitachi) 2. KCC																		
<b>REASON FOR CHANGE</b>  Product Discontinuance from Samsung SDI, avoid supplying shortage																					
<b>SAMPLE AVAILABILITY</b> See appendix (To obtain samples or production devices, please contact your AOS Sales Representative).	<b>FIRST SHIP DATE</b> Estimated to be from Jan, 10 <sup>th</sup> , 2021, or earlier upon customer approval.																				
<b>METHOD OF IDENTIFICATION</b>  Estimated to start from Date Code: '21A'.																					
<b>IMPACT OF CHANGE</b> <b>Form:</b> None <b>Fit:</b> None <b>Function:</b> None <b>Reliability:</b> None <b>Environment:</b> None																					
<b>QUALIFICATION / RELIABILITY DATA:</b>    																					

## 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
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

Note: the qualification is based on generic product family data.

**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
AOT1N60	Contact Sales	Complete	
AOT32374C	Contact Sales	Complete	
AOT3N100	Contact Sales	Complete	
AOT5N100	Contact Sales	Complete	
AOT7N60	Contact Sales	Complete	
AOT7N60_001	Contact Sales	Complete	
AOTF095A60L	Contact Sales	Complete	
AOTF095A60L_0C1	Contact Sales	Complete	
AOTF10N60_001	Contact Sales	Complete	
AOTF11N70	Contact Sales	Complete	
AOTF11N70L	Contact Sales	Complete	
AOTF11N70_001	Contact Sales	Complete	
AOTF11N70_002	Contact Sales	Complete	
AOTF125A60L	Contact Sales	Complete	
AOTF125A60L_3C1	Contact Sales	Complete	
AOTF12N50_009	Contact Sales	Complete	
AOTF12N65L_001	Contact Sales	Complete	
AOTF160A60L	Contact Sales	Complete	
AOTF160A60L_0C1	Contact Sales	Complete	
AOTF190A60BL	Contact Sales	Complete	
AOTF190A60CL	Contact Sales	Complete	
AOTF190A60CL_0C1	Contact Sales	Complete	
AOTF190A60CL_0C2	Contact Sales	Complete	
AOTF190A60L	Contact Sales	Complete	
AOTF190A60L_001	Contact Sales	Complete	
AOTF190A60L_002	Contact Sales	Complete	

AOTF190A60L_003	Contact Sales	Complete	
AOTF190A60L_0C1	Contact Sales	Complete	
AOTF280A60L	Contact Sales	Complete	
AOTF280A60L_001	Contact Sales	Complete	
AOTF280A60L_0C1	Contact Sales	Complete	
AOTF286L	Contact Sales	Complete	
AOTF288L	Contact Sales	Complete	
AOTF2910L	Contact Sales	Complete	
AOTF2916L	Contact Sales	Complete	
AOTF292L	Contact Sales	Complete	
AOTF296L	Contact Sales	Complete	
AOTF360A70L	Contact Sales	Complete	
AOTF360A70L_0C1	Contact Sales	Complete	
AOTF360A70L_3C1	Contact Sales	Complete	
AOTF360A70ZL	Contact Sales	Complete	
AOTF380A60CL	Contact Sales	Complete	
AOTF380A60CL_0C1	Contact Sales	Complete	
AOTF380A60L	Contact Sales	Complete	
AOTF380A60L_001	Contact Sales	Complete	
AOTF380A60L_0C1	Contact Sales	Complete	
AOTF409	Contact Sales	Complete	
AOTF409_002	Contact Sales	Complete	
AOTF4185	Contact Sales	Complete	
AOTF4185GL	Contact Sales	Complete	
AOTF4185_001	Contact Sales	Complete	
AOTF600A60L	Contact Sales	Complete	
AOTF600A70FL	Contact Sales	Complete	
AOTF600A70FL_0C1	Contact Sales	Complete	
AOTF600A70L	Contact Sales	Complete	

AOTF7N70	Contact Sales	Complete	
AOTF7N70L	Contact Sales	Complete	
AOTF9N70	Contact Sales	Complete	
AOTF9N70L	Contact Sales	Complete	
AOTF9N70L_001	Contact Sales	Complete	
AOTF9N70_001	Contact Sales	Complete	
AOTF9N70_002	Contact Sales	Complete	
AOWF095A60	Contact Sales	Complete	
AOWF11N70	Contact Sales	Complete	
AOWF125A60	Contact Sales	Complete	
AOWF160A60	Contact Sales	Complete	
AOWF190A60	Contact Sales	Complete	
AOWF190A60C	Contact Sales	Complete	
AOWF280A60	Contact Sales	Complete	
AOWF360A70	Contact Sales	Complete	
AOWF380A60C	Contact Sales	Complete	
AOWF600A60	Contact Sales	Complete	
AOWF600A70	Contact Sales	Complete	
AOWF600A70F	Contact Sales	Complete	
AOWF9N70	Contact Sales	Complete	