

# International Rectifier

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## Process Change Notification

**Date:** July 10, 2015  
**PCR Reference:** 555  
**PCN Reference:** 555-PCN180-Public-Addendum

### To Our Value Customer:

As always we appreciate your use of International Rectifier semiconductor products. Our commitment to customer satisfaction and continuous improvement is demonstrated by our change plans to enhance capacity, quality and reliability. This notice is to inform you of the following changes.

We would like to express our sincere appreciation for your cooperation regarding the following changes, and IR will work closely with you to support your requirements during this transition.

### Type of Change Notification:

Bill of materials (BOM) and process harmonization

### Description of Change:

Original PCN ref is : 555-PCN180-Public

Tin electro-plating metal finish, additional information regarding POD dimension.

Automotive IGBT Products in package TO247- Termination finish and Die Coat change from tin dipping finish to tin electro-plating finish on lead frame

Removal of die coating on Copack diode

PartNumber	Package	PCN Change
AUIRG4PH50S	TO247	Electro-plating
AUIRG4PH50S-205	TO247	Electro-plating
AUXKNG4PH50S-215	TO247	Electro-plating
AUIRGP35B60PD	TO247COPAK	Electro-plating
AUIRGP35B60PD-E	TO247COPAK	Electro-plating
AUIRGP4062D	TO247COPAK	Electro-plating + Die coat
AUIRGP4062D-E	TO247COPAK	Electro-plating + Die coat
AUIRGP4063D	TO247COPAK	Electro-plating + Die coat
AUIRGP4063D-E	TO247COPAK	Electro-plating + Die coat
AUIRGP4066D1	TO247COPAK	Electro-plating
AUXVNGP4062D-E	TO247COPAK	Electro-plating + Die coat

Addendum: Minor change incorporated regarding dimension  $\Phi P1$  in datasheet package outline drawing, change is minor and still conforms to Jedec requirements.

- Existing  $\Phi P1$ :  $6.7 \pm 0.03\text{mm}$
- Target  $\Phi P1$ :  $5.5 \pm 0.03\text{mm}$

### **Reason for the Change:**

Harmonized lead finish in-line with mass market requirements Improved product robustness via process automation and process modernization Equipment obsolescence, hence the need for process change to utilize assembly equipment supported by mass market.

### **Effect Date:**

January 10, 2016

International Rectifier will consider this change approved and will implement it by the effective date unless specific conditions of acceptance or data requests are provided in writing within 30 days of receipt of this notice. Please submit conditions of acceptance and data requests to the PCN coordinator listed at the end of this notice.

### **Impact of Change:**

The functionality of the product will remain unchanged. Very minor change expected on the fit of the product due to smaller tolerances on the lead thickness due to tin plating. The form of the product will visibly change. The die coat removal is internal inside the package and will not be visible. The overall impact is assessed as positive for the customer

### **Method of Identifying Changed Product:**

The changed product is visible with the naked-eye. The finishing of target new process will appear brighter as compared to the existing.

### **Products Affected:**

IR Part	Description
AUIRG4PH50S	Automotive, 1200V 74.000A AUTO TO-247
AUIRG4PH50S-205	
AUXKNG4PH50S-215	
AUIRGP35B60PD	Automotive 600V Warp2 150kHz Copack IGBT in a TO-247AD package
AUIRGP35B60PD-E	Automotive 600V Warp2 150kHz Copack IGBT in a TO-247AD package
AUIRGP4062D	
AUIRGP4062D-E	
AUIRGP4063D	Automotive 600V co-pack Trench IGBT in a TO-247AC package
AUIRGP4063D-E	Automotive 600V co-pack Trench IGBT in a TO-247AC package
AUIRGP4066D1	
AUXVNGP4062D-E	

### **Qualification:**

Parts passed all the reliability testing requirements. Reliability qualification report is available upon request. Qualification standards can be found on International Rectifier's web site at [www.irf.com/product-info/reliability](http://www.irf.com/product-info/reliability)

**Supporting Data Availability:**

Contact IR for supporting data on this change.

**Contact Information:**

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PCN Coordinator	Mark Ogden		<a href="mailto:mogden1@irf.com">mogden1@irf.com</a>
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