



# Product Change Notification



Product Group: Diodes Division / August 31, 2018 / PCN-DD-018-2018 Rev. 0

## Manufacturing Location Change for Commercial Grade Products in TO-263 & ITO-220 Clip Bond Packages

### DESCRIPTION OF CHANGE:

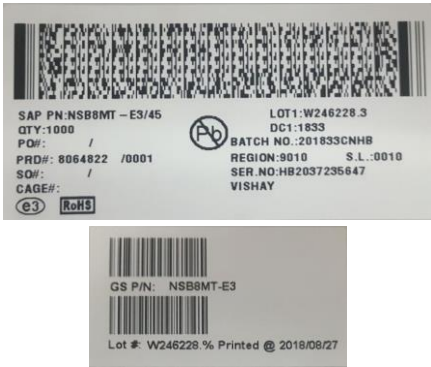





Vishay Diodes Division is transferring the assembly & final test of all clip bond assembly commercial grade products in TO-263 & ITO-220 packages from Vishay Tianjin factory to Vishay Xi'an factory.

In addition to the location change, all Schottky Rectifier products in ITO-220 package will have the following changes.

1. Solder paste composition changed from 88%Pb/2%Ag/10%Sn to 92.5%Pb/2.5%Ag/5%Sn.
2. MBRF1545CT-E3, MBRF1560CT-E3 and MBRF745-E3, clip size for device inner soldering optimized from 42\*42mil to 34\*34mil.

All other assembly raw material, process flows and controls used in Vishay Xi'an factory are the same as those used in current Vishay Tianjin factory production. There is no change in POD spec., form, fit and function of the device in customer applications.

All involved changes are summarized in below table:

Item	Before	After
<b>Assembly Site</b>	Vishay Tianjin	Vishay Xi'an
<b>Solder paste composition</b> (For Schottky Rectifier products in ITO-220 package)	88%Pb/2%Ag/10%Sn	92.5%Pb/2.5%Ag/5%Sn
<b>Clip Size</b> (For MBRF1545CT-E3, MBRF1560CT-E3 & MBRF7XX-E3)	42*42mil	34*34mil
<b>Label</b>		
<b>Inner Box</b> (For tube packing)	<p>ITO-220 Size: 21.3*6.4*1.8 inch</p>  <p>TO-263 Size: 21.3*6.4*1.8 inch</p> 	<p>ITO-220 Size: 22.7*5.7*1.7 inch</p>  <p>TO-263 Size: 21.3*4.1*2.2 inch</p> 

Item	Before	After
<b>Outer Box</b> (For tape & reel packing)	Size: 15*15*11.9 inch 	Size: 16.5*15.9*8.9 inch 

### CLASSIFICATION OF CHANGE:

Assembly Site

Direct Materials – for Schottky Rectifier products in ITO-220 package solder paste change

Assembly Process/Structure – for Schottky Rectifier products in ITO-220 package clip size change

**REASON FOR CHANGE:** Production line consolidation and Material consolidation/optimization

### EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE:

No change in quality, reliability and performance

**PRODUCT CATEGORY:** Rectifier

### PART NUMBERS/SERIES/FAMILIES AFFECTED:

Involved product groups are listed below and separated in 3 groups per involved changes:

1. Only assembly & final test site change:

P/N List				
BYQ28EB-100-E3/45	BYVB32-100-E3/45	BYWF29-150-E3/45	FEPF16CT-E3/45	FESB16JT-E3/81
BYQ28EB-100-E3/81	BYVB32-100-E3/81	BYWF29-200-E3/45	FEPF16DT-E3/45	FESB8AT-E3/45
BYQ28EB-150-E3/45	BYVB32-150-E3/45	BYWF29-50-E3/45	FEPF16FT-E3/45	FESB8AT-E3/81
BYQ28EB-150-E3/81	BYVB32-150-E3/81	FEPB16AT-E3/45	FEPF16GT-E3/45	FESB8BT-E3/45
BYQ28EB-200-E3/45	BYVB32-200-E3/45	FEPB16AT-E3/81	FEPF16HT-E3/45	FESB8BT-E3/81
BYQ28EB-200-E3/81	BYVB32-200-E3/81	FEPB16BT-E3/45	FEPF16JT-E3/45	FESB8CT-E3/45
BYQ28EF-100-E3/45	BYVB32-50-E3/45	FEPB16BT-E3/81	FESB16AT-E3/45	FESB8CT-E3/81
BYQ28EF-150-E3/45	BYVB32-50-E3/81	FEPB16CT-E3/45	FESB16AT-E3/81	FESB8DT-E3/45
BYQ28EF-200-E3/45	BYVF32-100-E3/45	FEPB16CT-E3/81	FESB16BT-E3/45	FESB8DT-E3/81
BYT28B-300-E3/45	BYVF32-150-E3/45	FEPB16DT-E3/45	FESB16BT-E3/81	FESB8FT-E3/45
BYT28B-300-E3/81	BYVF32-200-E3/45	FEPB16DT-E3/81	FESB16CT-E3/45	FESB8FT-E3/81
BYT28B-400-E3/45	BYVF32-50-E3/45	FEPB16FT-E3/45	FESB16CT-E3/81	FESB8GT-E3/45
BYT28B-400-E3/81	BYWB29-100-E3/45	FEPB16FT-E3/81	FESB16DT-E3/45	FESB8GT-E3/81
BYT28F-300-E3/45	BYWB29-100-E3/81	FEPB16GT-E3/45	FESB16DT-E3/81	FESB8HT-E3/45
BYT28F-400-E3/45	BYWB29-150-E3/45	FEPB16GT-E3/81	FESB16FT-E3/45	FESB8HT-E3/81
BYV29B-300-E3/45	BYWB29-150-E3/81	FEPB16HT-E3/45	FESB16FT-E3/81	FESB8JT-E3/45
BYV29B-300-E3/81	BYWB29-200-E3/45	FEPB16HT-E3/81	FESB16GT-E3/45	FESB8JT-E3/81
BYV29B-400-E3/45	BYWB29-200-E3/81	FEPB16JT-E3/45	FESB16GT-E3/81	FESF16AT-E3/45
BYV29B-400-E3/81	BYWB29-50-E3/45	FEPB16JT-E3/81	FESB16HT-E3/45	FESF16BT-E3/45
BYV29F-300-E3/45	BYWB29-50-E3/81	FEPF16AT-E3/45	FESB16HT-E3/81	FESF16CT-E3/45
BYV29F-400-E3/45	BYWF29-100-E3/45	FEPF16BT-E3/45	FESB16JT-E3/45	FESF16DT-E3/45



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P/N List				
FESF16FT-E3/45	MBRB1045-E3/81	MBRB3045CT-E3/81	NSF8JT-E3/45	UGB8BT-E3/81
FESF16GT-E3/45	MBRB1060-E3/45	MBRB30H100CT-E3/45	NSF8KT-E3/45	UGB8CT-E3/45
FESF16HT-E3/45	MBRB1060-E3/81	MBRB30H100CT-E3/81	NSF8MT-E3/45	UGB8CT-E3/81
FESF16JT-E3/45	MBRB10H100CT-E3/45	MBRB30H45CT-E3/45	SBLB1040CT-E3/45	UGB8DT-E3/45
FESF16JT-E3S/45	MBRB10H100CT-E3/81	MBRB30H45CT-E3/81	SBLB1040CT-E3/81	UGB8DT-E3/81
FESF8AT-E3/45	MBRB10H100-E3/45	MBRB30H60CT-E3/45	SBLB10L25-E3/45	UGB8FT-E3/45
FESF8BT-E3/45	MBRB10H100-E3/81	MBRB30H60CT-E3/81	SBLB10L25-E3/81	UGB8FT-E3/81
FESF8CT-E3/45	MBRB1545CT-E3/45	MBRB745-E3/45	SBLB25L30CT-E3/45	UGB8GT-E3/45
FESF8DT-E3/45	MBRB1545CT-E3/81	MBRB745-E3/81	SBLB25L30CT-E3/81	UGB8GT-E3/81
FESF8FT-E3/45	MBRB1545CT-E3C/I	MBRB745-E3C/I	UGB10BCT-E3/45	UGB8HT-E3/45
FESF8GT-E3/45	MBRB1560CT-E3/45	MBRB760-E3/45	UGB10BCT-E3/81	UGB8HT-E3/81
FESF8HT-E3/45	MBRB1560CT-E3/81	MBRB760-E3/81	UGB10CCT-E3/45	UGB8JT-E3/45
FESF8JT-E3/45	MBRB1635-E3/45	NSB8AT-E3/45	UGB10CCT-E3/81	UGB8JT-E3/81
GIB1401-E3/45	MBRB1635-E3/81	NSB8AT-E3/81	UGB10DCT-E3/45	UGF10BCT-E3/45
GIB1401-E3/81	MBRB1645-E3/45	NSB8BT-E3/45	UGB10DCT-E3/81	UGF10CCT-E3/45
GIB1402-E3/45	MBRB1645-E3/81	NSB8BT-E3/81	UGB10FCT-E3/45	UGF10DCT-E3/45
GIB1402-E3/81	MBRB1660-E3/45	NSB8DT-E3/45	UGB10FCT-E3/81	UGF10FCT-E3/45
GIB1403-E3/45	MBRB1660-E3/81	NSB8DT-E3/81	UGB10GCT-E3/45	UGF10GCT-E3/45
GIB1403-E3/81	MBRB2045CT-E3/45	NSB8GT-E3/45	UGB10GCT-E3/81	UGF18ACT-E3/45
GIB1404-E3/45	MBRB2045CT-E3/81	NSB8GT-E3/81	UGB18ACT-E3/45	UGF18BCT-E3/45
GIB1404-E3/81	MBRB2060CT-E3/45	NSB8JT-E3/45	UGB18ACT-E3/81	UGF18CCT-E3/45
GIB2401-E3/45	MBRB2060CT-E3/81	NSB8JT-E3/81	UGB18BCT-E3/45	UGF18DCT-E3/45
GIB2401-E3/81	MBRB20H100CT-E3/45	NSB8KT-E3/45	UGB18BCT-E3/81	UGF8AT-E3/45
GIB2402-E3/45	MBRB20H100CT-E3/81	NSB8KT-E3/81	UGB18CCT-E3/45	UGF8BT-E3/45
GIB2402-E3/81	MBRB2545CT-E3/45	NSB8MT-E3/45	UGB18CCT-E3/81	UGF8CT-E3/45
GIB2403-E3/45	MBRB2545CT-E3/81	NSB8MT-E3/81	UGB18DCT-E3/45	UGF8DT-E3/45
GIB2403-E3/81	MBRB2545CT-E3C/I	NSF8AT-E3/45	UGB18DCT-E3/81	UGF8FT-E3/45
GIB2404-E3/45	MBRB2560CT-E3/45	NSF8BT-E3/45	UGB8AT-E3/45	UGF8GT-E3/45
GIB2404-E3/81	MBRB2560CT-E3/81	NSF8DT-E3/45	UGB8AT-E3/81	UGF8HT-E3/45
MBRB1045-E3/45	MBRB3045CT-E3/45	NSF8GT-E3/45	UGB8BT-E3/45	UGF8JT-E3/45

## 2. Assembly & final test site change + Solder paste change:

P/N List				
MBRF1045-E3/45	MBRF10H100-E3/45	MBRF2045CT-E3/45	MBRF2545CT-E3/45	MBRF30H45CT-E3/45
MBRF1060-E3/45	MBRF1635-E3/45	MBRF2060CT-E3/45	MBRF2560CT-E3/45	SBLF10L25-E3/45
MBRF10H100CT-E3/45	MBRF1645-E3/45	MBRF20H100CT-E3/45	MBRF30H100CT-E3/45	SBLF25L30CT-E3/45

## 3. Assembly & final test site change + Solder paste change + Clip size change

P/N List		
MBRF1545CT-E3/45	MBRF1560CT-E3/45	MBRF745-E3/45

**VISHAY BRAND:** Vishay General Semiconductor

**TIME SCHEDULE:** Start Shipment Date from Vishay Xi'an: January 15, 2019

Last Time Buy of Existing P/N from Vishay Tianjin: March 15, 2019

Last Time Shipment of Existing P/N from Vishay Tianjin: May 19, 2019

**SAMPLE ABAILABILITY:** Available upon request.



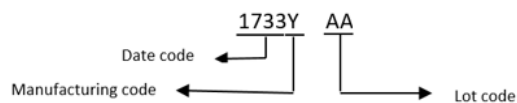
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## PRODUCT IDENTIFICATION:

The manufacturing code "Y" will be added to the last digit of date code, lot code would be added next to date code for identification of the new manufacturing site.



**QUALIFICATION DATA:** Available upon request.

**RESPONSE DATE:** This PCN is considered approved, without further notification, unless we receive specific customer concerns before **October 31, 2018** or as specified by contract.

**ISSUED BY:** R.S. Chin, Product Marketing Director – Rectifiers (Standard & Schottky)  
Alessandro Bonaudo, Product Marketing Director – Rectifiers (Ultrafast recovery)

**For further information, please contact your regional Vishay office.**

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