



# Product Change Notification



Product Group: DIODES / April 6<sup>th</sup>, 2018 / PCN-DD-007-2018 Rev. 00

## Additional assembly site for TO-247 package

**DESCRIPTION OF CHANGE:** In order to meet increasing demand of Rectifiers, Vishay Diodes Division is introducing an additional assembly line at a new subcontractor in China for commercial TO-247 Part Numbers.  
 The new subcontractor has received international quality system and environmental compliance certification ISO9001 and ISO14001.  
 Package Outline will be consolidated as illustrated in the annex 2.  
 Taking the chance of this capacity expansion, product nomenclature will be harmonized: Vishay Diodes Division will discontinue the Part Numbers with PBF suffix and keep active the Halogen free version only (-N3 suffix).

**CLASSIFICATION OF CHANGE:** Assembly Site

**REASON FOR CHANGE:** Capacity expansion for improving delivery support

**EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE:** There will be no effect on quality, reliability or electrical performance.

**PRODUCT CATEGORY:** Diodes & Rectifiers

**PART NUMBERS/SERIES/FAMILIES AFFECTED:**

TO-247			
Family	Halogen-free nomenclature		Old nomenclature (PBF)
	Part Number	Datasheet	Part number
SCHOTTKY DIODES	VS-30CPQ035-N3	<a href="#">96453</a>	VS-30CPQ035PBF
SCHOTTKY DIODES	VS-30CPQ040-N3	<a href="#">96453</a>	VS-30CPQ040PBF
SCHOTTKY DIODES	VS-30CPQ045-N3	<a href="#">96453</a>	VS-30CPQ045PBF
SCHOTTKY DIODES	VS-30CPQ050-N3	<a href="#">96454</a>	VS-30CPQ050PBF
SCHOTTKY DIODES	VS-30CPQ060-N3	<a href="#">96454</a>	VS-30CPQ060PBF
SCHOTTKY DIODES	VS-30CPQ080-N3	<a href="#">96480</a>	VS-30CPQ080PBF
SCHOTTKY DIODES	VS-30CPQ090-N3	<a href="#">96480</a>	VS-30CPQ090PBF
SCHOTTKY DIODES	VS-30CPQ100-N3	<a href="#">96480</a>	VS-30CPQ100PBF
SCHOTTKY DIODES	VS-30CPQ140-N3	<a href="#">96455</a>	VS-30CPQ140PBF
SCHOTTKY DIODES	VS-30CPQ150-N3	<a href="#">96455</a>	VS-30CPQ150PBF
SCHOTTKY DIODES	VS-40CPQ035-N3	<a href="#">96456</a>	VS-40CPQ035PBF
SCHOTTKY DIODES	VS-40CPQ040-N3	<a href="#">96456</a>	VS-40CPQ040PBF
SCHOTTKY DIODES	VS-40CPQ045-N3	<a href="#">96456</a>	VS-40CPQ045PBF
SCHOTTKY DIODES	VS-40CPQ050-N3	<a href="#">96457</a>	VS-40CPQ050PBF
SCHOTTKY DIODES	VS-40CPQ060-N3	<a href="#">96457</a>	VS-40CPQ060PBF
SCHOTTKY DIODES	VS-40CPQ080-N3	<a href="#">96481</a>	VS-40CPQ080PBF
SCHOTTKY DIODES	VS-40CPQ100-N3	<a href="#">96481</a>	VS-40CPQ100PBF
SCHOTTKY DIODES	VS-40L15CW-N3	<a href="#">96458</a>	VS-40L15CW PBF

TO-247			
Family	Halogen-free nomenclature		Old nomenclature (PBF)
	Part Number	Datasheet	Part number
SCHOTTKY DIODES	VS-40L40CW-N3	<a href="#">96459</a>	VS-40L40CWPBF
SCHOTTKY DIODES	VS-40L45CW-N3	<a href="#">96459</a>	VS-40L45CWPBF
SCHOTTKY DIODES	VS-52CPQ030-N3	<a href="#">96460</a>	VS-52CPQ030PBF
SCHOTTKY DIODES	VS-60CPQ150-N3	<a href="#">96461</a>	VS-60CPQ150PBF
SCHOTTKY DIODES	VS-63CPQ100-N3	<a href="#">96482</a>	VS-63CPQ100PBF
SCHOTTKY DIODES	VS-65PQ015-N3	<a href="#">96462</a>	VS-65PQ015PBF
SCHOTTKY DIODES	VS-72CPQ030-N3	<a href="#">96463</a>	VS-72CPQ030PBF
SCHOTTKY DIODES	VS-80CPQ020-N3	<a href="#">96464</a>	VS-80CPQ020PBF
SCHOTTKY DIODES	VS-80CPQ150-N3	<a href="#">96465</a>	VS-80CPQ150PBF
SCHOTTKY DIODES	VS-MBR3035WT-N3	<a href="#">96483</a>	VS-MBR3035WTPBF
SCHOTTKY DIODES	VS-MBR3045WT-N3	<a href="#">96483</a>	VS-MBR3045WTPBF
SCHOTTKY DIODES	VS-MBR4045WT-N3	<a href="#">96466</a>	VS-MBR4045WTPBF
SCHOTTKY DIODES	VS-MBR4060WT-N3	<a href="#">96467</a>	VS-MBR4060WTPBF
SCHOTTKY DIODES	VS-MBR40L15CW-N3	<a href="#">96468</a>	VS-MBR40L15CWPBF
SCHOTTKY DIODES	VS-MBR6045WT-N3	<a href="#">96469</a>	VS-MBR6045WTPBF
SCHOTTKY DIODES	VS-STPS30L60CW-N3	<a href="#">96470</a>	VS-STPS30L60CWPBF
SCHOTTKY DIODES	VS-STPS40L15CW-N3	<a href="#">96471</a>	VS-STPS40L15CWPBF
SCHOTTKY DIODES	VS-STPS40L40CW-N3	<a href="#">96472</a>	VS-STPS40L40CWPBF
SCHOTTKY DIODES	VS-STPS40L45CW-N3	<a href="#">96473</a>	VS-STPS40L45CWPBF

Note: upon this PCN approval, all future TO-247 Part Numbers will be shipped from either one of qualified locations.

**VISHAY BRAND(s):** Vishay Semiconductors

**TIME SCHEDULE:** Starting from June 6<sup>th</sup>, 2018 Vishay may start to ship from new location

**SAMPLE AVAILABILITY:** On customer request

**PRODUCT IDENTIFICATION:** Products manufactured at new subcontractor will be identified by the new plant digit of the data code marked on the 2<sup>nd</sup> line of the part.

**QUALIFICATION DATA:** See annex 1

**This PCN is considered approved, without further notification, unless we receive specific customer written concerns before June 6<sup>th</sup>, 2018 or as specified by contract**

**ISSUED BY:** SCHOTTKY DIODES

RS Chin, Vishay Diodes Product Marketing  
e-mail: [RS.Chin@vishay.com](mailto:RS.Chin@vishay.com)

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

**CONTACT INFORMATION:**

**The Americas**

Vishay Semiconductors  
150 Motor Parkway, Suite 101E  
Hauppauge, NY11788 USA  
Phone : 631 300 3816  
Fax : 631 300 3843  
[Diodes-Americas@vishay.com](mailto:Diodes-Americas@vishay.com)

**Europe**

Vishay Semiconductors  
Theresienstrasse 2  
D-74072 Heilbronn, Germany  
Phone: + 49 7131 67 3364 (3365)  
Fax: + 49 7131 67 2938  
[Diodes-Europe@vishay.com](mailto:Diodes-Europe@vishay.com)

**Asia**

Vishay Semiconductors  
15D, Sun Tong Infoport Plaza  
55 Huai Hai West Road  
Shanghai, Cina  
Phone: + 86 138 1787 2112  
Fax: + 86 21 5258 7979  
[Diodes-Asia@vishay.com](mailto:Diodes-Asia@vishay.com)

# ANNEX 1

## Qualification Data

### TO-247

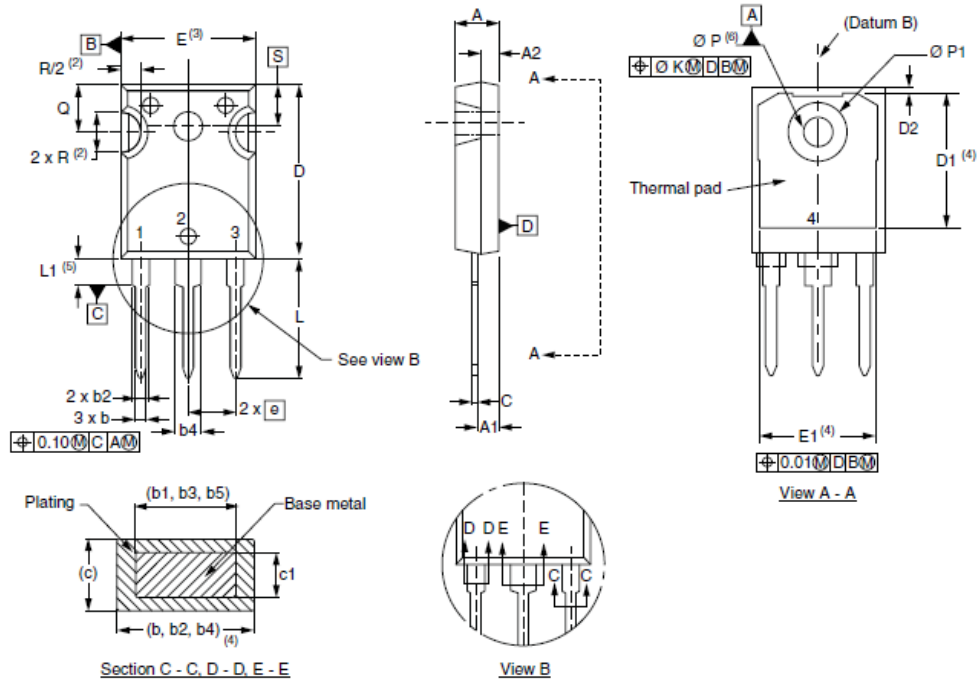
Test Item & Condition	Duration	Schottky
<b>HTRB</b> TjMax @100% Vr	168 Hrs	0/154
	500 Hrs	0/154
	1000 Hrs	0/154
<b>Solderability</b> @245°C/5sec	Post	0 / 20
<b>Temperature Cycling</b> @-55°C / +150°C / 30min.	250 Cyps	0/154
	500 Cyps	0/154
	1000 Cyps	0/154
<b>UHAST</b> @Ta= 130°C , 85%R.H.	48 Hrs	0/154
	96 Hrs	0/154
<b>IOL</b> Delta Tj=100°C T0n/Toff >= 2min	500 Hrs	0/154
	1000 Hrs	0/154
<b>H3TRB</b> 85°C 85% HR @ 100V	168 Hrs	0/154
	500 Hrs	0/154
	1000 Hrs	0/154

# ANNEX 2

## Package Outline Dimension

### TO-247AC 3L

**DIMENSIONS** in millimeters and inches



SYMBOL	MILLIMETERS		INCHES		NOTES	SYMBOL	MILLIMETERS		INCHES		NOTES
	MIN.	MAX.	MIN.	MAX.			MIN.	MAX.	MIN.	MAX.	
A	4.65	5.31	0.183	0.209		D2	0.51	1.35	0.020	0.053	
A1	2.21	2.59	0.087	0.102		E	15.29	15.87	0.602	0.625	3
A2	1.17	1.37	0.046	0.054		E1	13.46	-	0.53	-	
b	0.99	1.40	0.039	0.055		e	5.46 BSC		0.215 BSC		
b1	0.99	1.35	0.039	0.053		$\varnothing K$	0.254		0.010		
b2	1.65	2.39	0.065	0.094		L	14.20	16.10	0.559	0.634	
b3	1.65	2.34	0.065	0.092		L1	3.71	4.29	0.146	0.169	
b4	2.59	3.43	0.102	0.135		$\varnothing P$	3.56	3.66	0.14	0.144	
b5	2.59	3.38	0.102	0.133		$\varnothing P1$	-	7.39	-	0.291	
c	0.38	0.89	0.015	0.035		Q	5.31	5.69	0.209	0.224	
c1	0.38	0.84	0.015	0.033		R	4.52	5.49	0.178	0.216	
D	19.71	20.70	0.776	0.815	3	S	5.51 BSC		0.217 BSC		
D1	13.08	-	0.515	-	4						

**Notes**

- (1) Dimensioning and tolerancing per ASME Y14.5M-1994
- (2) Contour of slot optional
- (3) Dimension D and E do not include mold flash. Mold flash shall not exceed 0.127 mm (0.005") per side. These dimensions are measured at the outermost extremes of the plastic body
- (4) Thermal pad contour optional with dimensions D1 and E1
- (5) Lead finish uncontrolled in L1
- (6)  $\varnothing P$  to have a maximum draft angle of 1.5 to the top of the part with a maximum hole diameter of 3.91 mm (0.154")
- (7) Outline conforms to JEDEC<sup>®</sup> outline TO-247 with exception of dimension Q