



Product Group: SIL/Tue Sep 22, 2020/PCN-SIL-035-2020-REV-0

## **Commercial Power MOSFET Manufacturing Capacity Transfer**

**DESCRIPTION OF CHANGE:** Vishay Siliconix Division is moving assembly and test location from Vishay Xi'an factory to Advanced Semiconductor Engineering (ASE) plant located in Weihai, China for commercial High Voltage Power MOSFETs in Vishay's Super TO-247 package.

ASE has been a leading backend manufacturing company since 2003; The Weihai facility has provided world-class total manufacturing services for discrete MOSFETs since 2008. Vishay Siliconix has been a partner with the ASE Weihai facility since 2013. This qualification now adds Super TO-247 to other Vishay Siliconix commercial Power MOSFET packages supplied by ASE. The manufacturing process to be used in ASE is similar to that used in the Vishay Xi'an facility from which this package is currently manufactured.

ASE has received international quality systems and environmental compliance certifications including TS16949, ISO9001, ISO14001 and OSHAS 18001.

REASON FOR CHANGE: Manufacturing capacity consolidation for future expansion

**EXPECTED INFLUENCE ON QUALITY/RELIABILTY/PERFORMANCE:** There will be no affect on the quality, reliability, or performance. There will be no changes in minimum and maximum values on the data sheets. The finished good appearance and outline dimension variance are shown in annex.

PART NUMBERS/SERIES/FAMILIES AFFECTED: Please see materials list on the succeeding page.

VISHAY BRAND(s): Vishay Siliconix

TIME SCHEDULE: Start Shipment Date: Fri Jan 1, 2021

SAMPLE AVAILABILITY: Oct. 15, 2020

**PRODUCT IDENTIFICATION:** Products manufactured at ASE will be identified by a "N" in the first position of the date code marked on the 2nd line of the part

QUALIFICATION DATA: Qualification results are available upon request

This PCN is considered approved, without further notification, unless we receive specific customer concerns before Thu Dec 24, 2020 or as specified by contract.

ISSUED BY: Michael Hsieh, Michael.Hsieh@vishay.com

For further information, please contact your regional Vishay office.

CONTACT INFORMATION:

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IRFPS37N50APBF	IRFPS38N60LPBF	IRFPS40N50LPBF	IRFPS40N60KPBF	IRFPS43N50KPBF
SIHS36N50D-E3	SIHS90N65E-E3			

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Product Group: Vishay Siliconix/September 25, 2020/PCN SIL-0352020 Rev0

**TIME SCHEDULE:** Shipments of Super TO-247 products manufactured at ASE will begin in January 2021 Last Time Buy Date from original site: December 24, 2020 Last Time Shipment Date from original site: June 24, 2021

#### **Original P/N from XI'AN** Suggested new P/N from ASE IRFPS37N50APBF SiHFPS37N50A-GE3 SiHFPS38N60L-GE3 IRFPS38N60LPBF IRFPS40N50LPBF SiHFPS40N50L-GE3 IRFPS40N60KPBF SiHFPS40N60K-GE3 IRFPS43N50KPBF SiHFPS43N50K-GE3 SIHS36N50D-E3 SIHS36N50D-GE3 SIHS90N65E-E3 SIHS90N65E-GE3

## PCN-SIL-0352020 Affected Parts List

## **Samples**

The following parts are planned to be built for sampling:

Material
IRFPS37N50APBF
IRFPS38N60LPBF
IRFPS40N50LPBF
IRFPS43N50KPBF





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## ANNEX

## Super TO-247 Outline

XI'AN







Outline Drawing Comparison									
Items	JEDEC		lt a ma a	XI'AN		Itomo	ASEWH		Change
	Min	Max	Items	Min	Max	Items	Min	Max	Change
А	4.50	5.50	А	4.70	5.30	А	4.83	5.21	+0.13 / -0.90
A1	1.45	2.15	A1	1.50	2.50	A2	1.91	2.16	+0.41 / -0.34
A2	1.65	2.35	A2	2.25	2.65	A1	1.91	2.16	-0.34 / -0.49
b	1.45	1.60	b	1.30	1.60	b	1.07	1.33	-0.23 / -0.27
b2	2.00	2.40	b2	1.80	2.20	b1	1.91	2.41	+0.11 / +0.21
b4	3.00	3.15	b4	3.00	3.25	b3	2.87	3.38	-0.13 / +0.13
с	1.10	1.30	с	0.38	0.89	с	0.55	0.68	+0.17 / -0.21
D	19.80	20.80	D	19.80	20.80	D	20.80	21.10	+1.00 / +0.30
D1	15.50	16.10	D1	15.50	16.10	D1	16.25	17.65	+0.75 / +1.55
D2	0.70	1.30	D2	0.70	1.30	D2	0.50	0.80	-0.20 / -0.50
E	15.10	16.10	E	15.10	16.10	E	15.75	16.13	+0.65 / +0.03
E1	13.30	13.90	E1	13.30	13.90	E1	13.10	14.15	-0.20 / +0.25
е	5.45 BSC e		е	5.44 BSC		е	5.44 BSC		None
L	13.80	14.80	L	13.70	14.70	L	19.81	20.32	+6.11 / +5.62
L1	1.00	1.60	L1	1.00	1.60	-	-	-	-
R	2.00	3.00	R	2.00	3.00	-	-	-	-

#### **Outline Drawing Comparison**







#### **ASEWH**



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