

Product Change Notification



Product Group: Vishay Siliconix/May 23, 2014/PCN-SIL-0102014 Rev 0

Qualification of ASE as an Additional Assembly Site of TO-220 Commercial Power Mosfets

DESCRIPTION OF CHANGE: Vishay Siliconix would like to announce the approval of Advanced Semiconductor Engineering (ASE) plant located in Weihai, China as an additional assembly facility for TO-220, MOSFET devices.

ASE Weihai has provided world-class total manufacturing services since Q1 2008, and has received international quality systems and environmental compliance certifications TS16949, ISO9001, ISO14001 and OSHAS 18001.

This facility will join the current Vishay-Siliconix qualified facilities, in providing additional capacity for MOSFETs built in the TO-220 package. The manufacturing process to be used in ASE will be similar to that used in the Xi'an facility. No electrical changes in the device are expected.

Additionally, there will be slight modifications to the mechanical dimensions of the TO-220 Package Outline. The updated TO-220 package outline drawing is exhibited below in this PCN.

CLASSIFICATION OF CHANGE: Manufacturing Expansion

REASON FOR CHANGE: Increased capacity, additional source.

EXPECTED INFLUENCE ON QUALITY/RELIABILTY/PERFORMANCE: None

PRODUCT CATAGORY: MOSFET

PART NUMBERS/SERIES/FAMILIES AFFECTED: Refer to list of active part numbers included with this PCN

VISHAY BRAND(s): Vishay-Siliconix

TIME SCHEDULE: Shipment of production volumes will begin August 23, 2014.

SAMPLE AVAILABILITY: Please refer to the list below for the parts that will be built for sampling to customers. Please contact your regional Vishay Sales office for sample ordering.

PRODUCT IDENTIFICATION: TO-220 products manufactured in ASE will have part marking in the form of **N46K** where the **N** is the factory designator for ASE.

QUALIFICATION DATA: Please contact your local sales office for a copy of the qualification report.

This PCN is considered approved, without further notification, unless we receive specific customer concerns before August 23, 2014 or as specified by contract.

ISSUED BY: Don Larson, Vishay Siliconix, Technical Marketing Manager.

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For further information, please contact your regional Vishay office.

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Vishay Intertechnology, Inc.



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Affected Parts

| Part Number | |
|-------------|-------------|-------------|-------------|----------------|--|
| IRF510PBF | IRF730PBF | IRF9630PBF | IRFZ10PBF | IRLZ34PBF | |
| IRF520PBF | IRF740BPBF | IRF9Z10PBF | IRFZ14PBF | SIHP10N40D-E3 | |
| IRF530PBF | IRF820APBF | IRF9Z14PBF | IRFZ20PBF | SIHP10N40D-GE3 | |
| IRF610PBF | IRF820PBF | IRF9Z20PBF | IRFZ24PBF | SIHP5N50D-E3 | |
| IRF614PBF | IRF830APBF | IRF9Z24PBF | IRFZ30PBF | SIHP5N50D-GE3 | |
| IRF620PBF | IRF830BPBF | IRF9Z30PBF | IRFZ34PBF | SIHP6N40D-E3 | |
| IRF624PBF | IRF830PBF | IRF9Z34PBF | IRL510PBF | SIHP6N40D-GE3 | |
| IRF630PBF | IRF840BPBF | IRFBC20PBF | IRL520PBF | SIHP8N50D-E3 | |
| IRF634PBF | IRF9510PBF | IRFBC30APBF | IRL530PBF | SIHP8N50D-GE3 | |
| IRF710PBF | IRF9520PBF | IRFBC30PBF | IRL620PBF | | |
| IRF720PBF | IRF9530PBF | IRFBE20PBF | IRL630PBF | | |
| IRF730APBF | IRF9610PBF | IRFBF20PBF | IRLZ14PBF | | |
| IRF730BPBF | IRF9620PBF | IRFBG20PBF | IRLZ24PBF | | |

Samples

The following parts are planned to be built for sampling:

| Part Number | | | | | | | | |
|-------------|------------|------------|--|--|--|--|--|--|
| IRF510PBF | IRF730PBF | IRF840BPBF | | | | | | |
| IRF520PBF | IRF740BPBF | IRF9630PBF | | | | | | |
| IRF530PBF | IRF820PBF | IRFBC20PBF | | | | | | |
| IRF610PBF | IRF830PBF | IRFBG20PBF | | | | | | |



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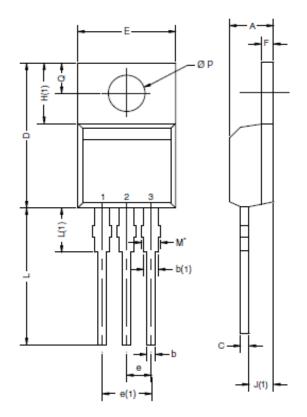
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Outline Drawing

| DIM (inches) | JEDEC | | Current | | Revised (Updates in BOLD) | | Change |
|--------------|-----------|-------|---------|-------|---------------------------|-------|---------------|
| | Min. | Max. | Min. | Max. | Min. | Max. | |
| Α | 0.140 | 0.190 | 0.167 | 0.183 | 0.163 | 0.185 | -0.004/+0.002 |
| b | 0.015 | 0.040 | 0.027 | 0.040 | 0.027 | 0.040 | None |
| b(1) | 0.045 | 0.070 | 0.047 | 0.068 | 0.045 | 0.068 | -0.02 |
| С | 0.014 | 0.024 | 0.014 | 0.024 | 0.014 | 0.024 | None |
| D | 0.560 | 0.650 | 0.585 | 0.610 | 0.564 | 0.624 | -0.021/+0.014 |
| E | 0.380 | 0.420 | 0.395 | 0.414 | 0.392 | 0.414 | -0.003 |
| е | 0.100 BSC | | 0.095 | 0.105 | 0.095 | 0.105 | None |
| e(1) | 0.200 BSC | | 0.192 | 0.208 | 0.192 | 0.208 | None |
| F | 0.020 | 0.055 | 0.045 | 0.055 | 0.017 | 0.055 | -0.028 |
| H(1) | 0.230 | 0.270 | 0.240 | 0.255 | 0.240 | 0.264 | +0.009 |
| J(1) | 0.080 | 0.115 | 0.095 | 0.115 | 0.095 | 0.115 | None |
| L | 0.500 | 0.580 | 0.526 | 0.552 | 0.526 | 0.567 | +0.015 |
| L(1) | | 0.250 | 0.131 | 0.150 | 0.131 | 0.159 | +0.009 |
| ¢ P | 0.139 | 0.161 | 0.139 | 0.155 | 0.139 | 0.155 | None |
| Q | 0.100 | 0.116 | 0.102 | 0.118 | 0.100 | 0.118 | -0.002 |
| *M | None | | 0.052 | 0.064 | 0.052 | 0.064 | None |

Notes:

- 1. M = 0.052 to 0.064 inches (dimension including protrusion) Heatsink hole for HVM.
- 2. Outline conforms to JEDEC outline TO-220 AB with exception of dimension F.



Vishay Intertechnology, Inc.

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