



Product Change Notification



Product Group: Vishay Siliconix/ SIL-0012018/ January 24, 2018

Additional Commercial Power MOSFET Wafer Fabrication Capacity

DESCRIPTION OF CHANGE: To meet increasing demand for Low Voltage Power MOSFET products, Vishay Siliconix has completed qualification for the expansion of commercial Low Voltage MOSFET 8-inch wafer capacity to foundry partner Tower-Jazz located in San Antonio, Texas. Tower-Jazz is a wholly-owned subsidiary of Tower Semiconductor, Ltd. The 80,000 square-foot clean-room facility was opened by Maxim Integrated in 2008, and will retain highly-skilled production personnel, quality systems and integration engineering currently supporting Maxim and Vishay. The Tower Texas facility supports advanced analog platforms for die geometries with feature sizes down to 130nm.

Tower Semiconductor has been a wafer foundry partner of Vishay Siliconix since 2005, servicing Vishay's high-volume production with its 6-inch and 8-inch facilities. Founded in 1993, Tower Semiconductor is a worldwide supplier for foundry services of wafer manufacturing. Tower Semiconductor is head-quartered in Migdal Haemek, Israel, and is certified to ISO9001, ISO14001 and TS16949. <http://www.towersemi.com>.

CLASSIFICATION OF CHANGE: Wafer Fabrication Location

REASON FOR CHANGE: Increased Low Voltage MOSFET manufacturing capacity.

EXPECTED INFLUENCE ON QUALITY/RELIABILITY/PERFORMANCE: No effect on quality, reliability or performance.

PRODUCT CATEGORY: Commercial Low Voltage MOSFETs

PART NUMBERS/SERIES/FAMILIES AFFECTED: See page 2 of this PCN

VISHAY BRAND(s): Vishay Siliconix

TIME SCHEDULE: Shipments with products containing Tower Texas die will begin in April 2018 for those products having completed transfer qualification.

SAMPLE AVAILABILITY: Please contact your regional Vishay Sales office for sample availability. When requesting samples please be sure to reference this PCN number.

PRODUCT IDENTIFICATION: Commercial Low Voltage MOSFET products containing Tower die will have "K" in the 4th character location (e.g. W83K).

QUALIFICATION DATA: Qualification data will be available upon completion of transfer qualification testing. Test criteria are listed on page 3 of this PCN.

This PCN is considered approved, without further notification, unless we receive specific customer concerns before April 24, 2018 or as specified by contract.

ISSUED BY: Dave MacDonald, Vishay Siliconix, Senior Manager Product Marketing
Email address: Dave.macdonald@Vishay.com

For further information, please contact your regional Vishay office.

The Americas

Vishay Americas
One Greenwich
Shelton, CT 06484
T: 203-452-5662
F: 203-452-5676

Europe

Vishay Electronic GmbH
Place Geheimrat-Rosenthal-Strasse 100
95100
Selb, Germany
T: 49-9287-71 0
F: 49-9287-70435

Asia

Vishay Intertechnology Asia Pte.
Ltd
25 Tampiness Street 92
#02-00 Keppel Building
Singapore 528877
T: 65-6788-6668
F: 65-6788-0988

Vishay Intertechnology, Inc.

Corporate Headquarters 63 Lincoln Highway, Malvern, PA 19355-2143 U.S.A. Phone (610) 644-1300 Fax (610) 296-0657 www.vishay.com

ONE OF THE WORLD'S LARGEST MANUFACTURERS OF DISCRETE SEMICONDUCTORS AND PASSIVE COMPONENT

Procedure #



Product Change Notification



Product Group: Vishay Siliconix/ SIL-0012018/ January 24, 2018

PCN SIL-0012018 Parts List

SI2323DDS-T1-GE3	SI7655ADN-T1-GE3
SI2333DDS-T1-GE3	SI7655DN-T1-GE3
SI3443DDV-T1-GE3	SIA437DJ-T1-GE3
SI3473DDV-T1-GE3	SIA447DJ-T1-GE3
SI3477DV-T1-GE3	SIA447DJ-T4-GE3
SI3493DDV-T1-GE3	SIA449DJ-T1-GE3
SI4403DDY-T1-GE3	SIA929DJ-T1-GE3
SI5471DC-T1-GE3	SIA975DJ-T1-GE3
SI7615ADN-T1-GE3	SIR401DP-T1-GE3
SI7615CDN-T1-GE3	SIS415DNT-T1-GE3
SI7623DN-T1-GE3	SIS435DNT-T1-GE3
SI7625DN-T1-GE3	SI7157DP-T1-GE3

Vishay Intertechnology, Inc.

Corporate Headquarters 63 Lincoln Highway, Malvern, PA 19355-2143 U.S.A. Phone (610) 644-1300 Fax (610) 296-0657 www.vishay.com

ONE OF THE WORLD'S LARGEST MANUFACTURERS OF DISCRETE SEMICONDUCTORS AND PASSIVE COMPONENT

Procedure #



Product Change Notification



Product Group: Vishay Siliconix/ SIL-0012018/ January 24, 2018

Qualification for Wafer Fabrication Technology Transfer

All Wafer Fabrication Technology transfers receive a full qualification based on JEDEC criteria using 3 lots. After a Wafer Fabrication Platform Technology is qualified all subsequent devices released related to this platform technology will have been qualified by *Extension* – 1 lot tested to HTRB, HTGB, and ESD.

Qualification test	Conditions	# of Lots, # of samples per lot	Time Scale Hours/Cycles	Results: samples tested/# of failures	Comments
1a. Solder Reflow Preconditioning	168 hr 85/85 3 cyc @ 250C max				This test shall apply to test 4 to 6
2. HTRB	Ta = 150°C Vds = 80% rating of Vds	3 Lots, 82 samples per lot	1000 Hours	246/0	
3. HTGB	Ta = 150°C Vgs = 100% rating of Vgs	3 Lots, 82 samples per lot	1000 Hours	246/0	
4. Temperature Cycling	-65°C to +150°C air to air	3 Lots, 82 samples per lot	1000 Cycles	246/0	
5. Pressure Pot	+121°C, 15 PSIG	3 Lots, 82 samples per lot	96 Hours	246/0	
6. HAST	+130°C, 85%RH Vgs = 100% rating of Vgs	3 Lots, 82 samples per lot	100 Hours	246/0	
8. ESD	HBM CDM	1 Lot, 10 samples 1 Lot, 10 samples	0 0	10/0 10/0	

Vishay Intertechnology, Inc.

Corporate Headquarters 63 Lincoln Highway, Malvern, PA 19355-2143 U.S.A. Phone (610) 644-1300 Fax (610) 296-0657 www.vishay.com

ONE OF THE WORLD'S LARGEST MANUFACTURERS OF DISCRETE SEMICONDUCTORS AND PASSIVE COMPONENT

Procedure #