Product Change Notification

Product Group: Vishay Siliconix/ SIL-0182017/ November 24, 2017

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/RELIABILTY/PERFORMANCE: No effect on quality, reliability or performance.

PRODUCT CATAGORY: 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 February 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. W81**K**).

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 February 22, 2018 or as specified by contract.

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PCN SIL-0182017 Parts List

SI1013CX-T1-GE3	SI4401DDY-T1-GE3
SI1317DL-T1-GE3	SI4403CDY-T1-GE3
SI1467DH-T1-E3	SI4413DDY-T1-GE3
SI1467DH-T1-GE3	SI4425DDY-T1-GE3
SI1539CDL-T1-GE3	SI4431CDY-T1-E3
SI1553CDL-T1-GE3	SI4431CDY-T1-GE3
SI1967DH-T1-E3	SI4435DDY-T1-GE3
SI1967DH-T1-GE3	SI4447ADY-T1-GE3
SI2301CDS-T1-GE3	SI4599DY-T1-GE3
SI2303CDS-T1-E3	SI4825DDY-T1-GE3
SI2303CDS-T1-GE3	SI4835DDY-T1-E3
SI2305CDS-T1-GE3	SI4835DDY-T1-GE3
SI2307CDS-T1-E3	SI4925DDY-T1-GE3
SI2307CDS-T1-GE3	SI5403DC-T1-GE3
SI2319CDS-T1-GE3	SI5419DU-T1-GE3
SI2333CDS-T1-E3	SI5457DC-T1-GE3
SI2333CDS-T1-GE3	SI5935CDC-T1-E3
SI2343CDS-T1-GE3	SI5935CDC-T1-GE3
SI2367DS-T1-GE3	SI7121DN-T1-GE3
SI3417DV-T1-GE3	SI7129DN-T1-GE3
SI3433CDV-T1-E3	SI7143DP-T1-GE3
SI3433CDV-T1-GE3	SI7149DP-T1-GE3
SI3443CDV-T1-E3	SI7613DN-T1-GE3
SI3443CDV-T1-GE3	SI7617DN-T1-GE3
SI3457CDV-T1-E3	SI7619DN-T1-GE3
SI3457CDV-T1-GE3	SIA421DJ-T1-GE3
SI3473CDV-T1-E3	SIA421DJ-T4-GE3
SI3473CDV-T1-GE3	SIA427ADJ-T1-GE3
SI3483CDV-T1-E3	SIA441DJ-T1-GE3
SI3483CDV-T1-GE3	SIA517DJ-T1-GE3
SI3493BDV-T1-E3	SIA519EDJ-T1-GE3
SI3493BDV-T1-GE3	SIA533EDJ-T1-GE3
SI3585CDV-T1-GE3	

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	