# **ON Semiconductor**



# FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20075

Generic Copy

#### Issue Date: 26-Apr-2013

TITLE: Die change for the 2SK596S-B and the 2SK596S-C

**PROPOSED FIRST SHIP DATE:** 26-Jul-2013 (or earlier with customer approval) <The actual ship date will be different by each product, please check the responsible Sales person.>

AFFECTED CHANGE CATEGORY(S): Wafer Fabrication

#### FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Kazunori Akita <<u>Kazunori.Akita@onsemi.com</u>>

**SAMPLES:** Contact your local ON Semiconductor Sales Office

#### ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Kazutoshi Kitazume <<u>Kazutoshi.Kitazume@onsemi.com</u>>

#### NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

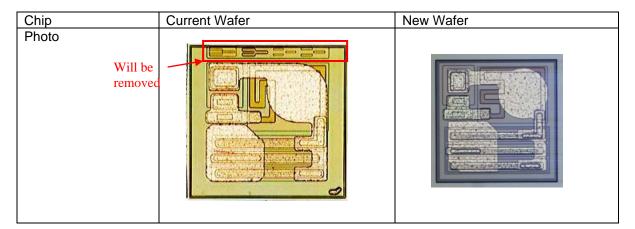
Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <quality@onsemi.com>.

#### **DESCRIPTION AND PURPOSE:**

Die of the 2SK596 will be changed by removing a test pattern.

From the end of 2012, there was a rapid increase in demand for the product. We are now running short of the bridge inventory because the production plan for 2013 was created based on the actual sales quantities in 2012. Therefore, the prompt customer approvals are required. There is no change in electrical parametric performance by this die change.



**ON Semiconductor** 



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## **RELIABILITY DATA SUMMARY:**

### Reliability Test Results:

## **Reliability Test Data**

SANYO's Part Number :

## 2SK596S-B(PCN)

Test		Condition	Interval	Results
Steady State Operating Life	*1	Tj=150degC	1,000h	Pass
High-Temperature Reverse-Bias	*1	Ta=150degC,VGDO=20V	1,000h	Pass
Temperature Humidity Storage	*1	Ta=85degC,RH=85%	1,000h	Pass
Temperature Cycle	*1	Ta=-55degC⇔150degC (each 30min)	100cycles	Pass
Pressure Cooker	*1	Ta=121degC,2.03×10⁵Pa,100%	50h	Pass
High Temperature Storage	*1	Ta=150degC	1,000h	Pass
Low Temperature Storage	*1	Ta=-55degC	1,000h	Pass
Resistance to Soldering heat		Solder Temp.:260±5degC	10s	Pass
Solderability	*2	Solder Temp.:245±5degC	5s	Pass
Terminal Strength (Pull)	*3	Load=5N	10s	Pass
Terminal Strength (Bending)	*3	Load=2.5N,0⇔90°	2times	Pass
Free Drop		h=75cm,Maple board	3times	Pass

Notice) \*1 Pre-treatment: Resistance to Soldering heat (Flow:260degC/10s)

\*2 Pre-treatment: Steam aging(105degC/100%RH/8h), Failure criterion: 95% or more

\*3 failure criterion: No falling away

## **ELECTRICAL CHARACTERISTIC SUMMARY:**

There is no change in electrical parametric performance. Characterization data is available upon request.

## CHANGED PART IDENTIFICATION:

The products before and after the die change can be identified by assembly lot number. Before: 3D3 After: 3D4

## List of affected General Parts:

2SK596S-B 2SK596S-C