


Standardized Information for Process/Product Change Notification (PCN)

1. PCN basic data		
1.1 Company		TAIWAN SEMICONDUCTOR CO.,LTD
1.2 PCN No.	PCN20008	
1.3 Title of PCN	Qualification of new subcon for SOD-123, SOD-323F, SOD-523F package	
1.4 Product Category	Active Components - Integrated Circuits	
1.5 Issue date	2020/08/14	
1.6 PCN revision history (optional)	1.7 Issue date of previous revision (optional)	1.8 Delta to previous revision (optional)

Form provided by ZVEI - Revision 4.0

2. PCN Team		
2.1 Contact supplier		
2.1.1 Name	Sunnie Lin	
2.1.2 Phone	+886-2-8913-1588 Ext:2205	
2.1.3 Email	sunnie.lin@mail.ts.com.tw	
2.2 Team supplier (optional)		
2.2.1 Name (optional)	2.2.2 Phone (optional)	2.2.3 Email (optional)
Chris Lin	+886 2 89131588 Ext.2406	chris_lin@mail.ts.com.tw
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3. Changes			
No.	3.0 Ident	3.1 Category	3.2 Type of change
#1	SEM-DS-02	DATA SHEET	Correction of data sheet or issue of errata
#2	SEM-PA-18	PROCESS - ASSEMBLY	Move all or parts of production to a different assembly site.

4. Description of change		
Change #1	Old	New
Change #1	Datasheet Correction Ordering information remove factory code : 1. RB751V-40WS SOD-323F POD thickness (0.8~1.10 mm) change : 1. BAS316WS 2. BAT42WS 3. BAV19WS 4. RB751V-40WS Forward current derating curve : 1. BAT42WS/BAT43WS No test item (thermal performance) 1. BAS316WS No VZ@IZ curve follow test result 1. BZX584B series 2. BZT52Cxx-G series	Datasheet Correction Ordering information remove factory code : 1. RB751V-40WS SOD-323F POD thickness change to (0.6~1.0mm) : 1. BAS316WS 2. BAT42WS 3. BAV19WS 4. RB751V-40WS Revise forward current derating curve (IF current:200mA) : 1. BAT42WS/BAT43WS Add test item (thermal performance) 1. BAS316WS Add VZ@IZ curve follow test result 1. BZX584B series 2. BZT52Cxx-G series

<p>Change #2</p>	<p>Current Subcon :</p> <p>Subcon A for :</p> <ol style="list-style-type: none"> 1. SOD-123 (SKY, SWCH & Zener) <p>Subcon B for:</p> <ol style="list-style-type: none"> 1. SOD-123 (SKY, SWCH & Zener) <p>Subcon C for:</p> <ol style="list-style-type: none"> 1. SOD-323F (SKY & SWCH) 2. SOD-523F (SKY) <p>Subcon D for:</p> <ol style="list-style-type: none"> 1. SOD-523F (Zener) <p>Note: Subcon A, B, C & D will continue mass production support.</p>	<p>Additional Subcon :</p> <p>Subcon E for :</p> <ol style="list-style-type: none"> 1. SOD-123 (SKY, Zener, SWCH) 2. SOD-323F (SKY, SWCH) 3. SOD-523F (SKY, Zener)
<p>4.1 Anticipated impact on form, fit, function, reliability or processability?</p>	<p>This change will have no impact on any of the electrical parameters of the products involve. The product test conditions, test limits and performance will remain unchanged. Subcon "E" facility will produce products with the same level of quality and reliability as the existing manufacturing sites.</p> <p>In addition there will be no changes in POD (no impact on form, fit and function).</p>	
<p>4.2 Reference parts with customer number (optional)</p>		

5. Reason / motivation for change	
5.1 Motivation	<p>Subcon E is capable to support assembly of SOD-123, SOD-323F and SOD-523F packages with the level of quality and reliability comparable to the existing subcon sites.</p> <p>This products are assmbled in SOD-123, SOD-323F and SOD-523F packages. Subcon A, B, C, D currently assembles these products.</p>
5.2 Additional explanation (optional)	<p>Taiwan Semiconductor Co., LTD (TSC) is qualifying Subcon "E" as an alternate assembly and test location for SOD-123, SOD-323F and SOD-523F package types.</p> <p>Subcon "E" is an ISO 9001 and IATF 16949 certified company. TSC will also continue to assemble and test SOD-123, SOD-323F and SOD-523F products using existing qualified suppliers.</p> <p>The additional flexibility resulting from the qualification of Subcon "E" will give TSC improved ability to respond to large orders with minimum lead times. All of the sites are currently qualified and utilized in high volume production by TSC for very similar products.</p>

6. Marking of parts / traceability of change	
6.1 Description	Use factory code for traceability

7. Timing / schedule		
7.1 Date of qualification results	2020/06/18	
7.2 Last order date (optional)		N/A
7.3 Last delivery date (optional)		N/A
7.4 Intended start of delivery	2020/11/12	
7.5 Qualification samples available?	Can be submitted 2 weeks upon receipt of customer order.	
7.6 Customer feedback required until	2020/09/28	

8. Qualification / validation			
8.1 Description (e.g. qual. plan/report, AEC-Q...)	Qualification/validation is in accordance with applicable JESD22 and TSC qualification plan requirements.		
8.2 Qualification report and qualification results	available (see attachement)	issue date	2020/06/18

9. Input to customer for risk assessment process
<p>Human Resource : No Risk Equipment : No Risk Technology-Wafer : No Risk Assembly & Test : No Risk Form/ Fit / Function : No Risk Reliability : No Risk</p>

