


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 attachment)	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>

Family	Package	TSC P/N	New TSC P/N
Schottky	SOD-123	BAT42W RHG	No Change
Schottky	SOD-123	BAT43W RHG	No Change
Schottky	SOD-123	SD103AW RHG	No Change
Schottky	SOD-123	SD103BW RHG	No Change
Schottky	SOD-123	SD103CW RHG	No Change
Schottky	SOD-323F	BAT42WS R9	No Change
Schottky	SOD-323F	BAT42WS R9G	No Change
Schottky	SOD-323F	BAT42WS RR	No Change
Schottky	SOD-323F	BAT42WS RRG	No Change
Schottky	SOD-323F	BAT43WS R9	No Change
Schottky	SOD-323F	BAT43WS R9G	No Change
Schottky	SOD-323F	BAT43WS RR	No Change
Schottky	SOD-323F	BAT43WS RRG	No Change
Schottky	SOD-323F	RB751V-40WS R9	No Change
Schottky	SOD-323F	RB751V-40WS R9G	No Change
Schottky	SOD-323F	RB751V-40WS RR	No Change
Schottky	SOD-323F	RB751V-40WS RRG	No Change
Schottky	SOD-323F	RB751V-40WS-B0 R9	RB751V-40WS R9
Schottky	SOD-323F	RB751V-40WS-B0 R9G	RB751V-40WS R9G
Schottky	SOD-323F	RB751V-40WS-B0 RR	RB751V-40WS RR
Schottky	SOD-323F	RB751V-40WS-B0 RRG	RB751V-40WS RRG
Schottky	SOD-523F	RB520S-30 RK	No Change
Schottky	SOD-523F	RB520S-30 RKG	No Change
Schottky	SOD-523F	RB520S-30 RS	No Change
Schottky	SOD-523F	RB520S-30 RSG	No Change
Switching Diode & Array	SOD-323F	BAS316WS R9	No Change
Switching Diode & Array	SOD-323F	BAS316WS R9G	No Change
Switching Diode & Array	SOD-323F	BAS316WS RR	No Change
Switching Diode & Array	SOD-323F	BAS316WS RRG	No Change
Switching Diode & Array	SOD-323F	BAV19WS R9	No Change
Switching Diode & Array	SOD-323F	BAV19WS R9G	No Change
Switching Diode & Array	SOD-323F	BAV19WS RR	No Change
Switching Diode & Array	SOD-323F	BAV19WS RRG	No Change
Switching Diode & Array	SOD-323F	BAV20WS R9	No Change
Switching Diode & Array	SOD-323F	BAV20WS R9G	No Change
Switching Diode & Array	SOD-323F	BAV20WS RR	No Change
Switching Diode & Array	SOD-323F	BAV20WS RRG	No Change
Switching Diode & Array	SOD-323F	BAV21WS R9	No Change
Switching Diode & Array	SOD-323F	BAV21WS R9G	No Change
Switching Diode & Array	SOD-323F	BAV21WS RR	No Change
Switching Diode & Array	SOD-323F	BAV21WS RRG	No Change
Zener Diode & Array	SOD-123	BZT52C10-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C11-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C12-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C13-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C15-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C16-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C18-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C20-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C22-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C24-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C27-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C2V4-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C2V7-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C30-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C33-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C36-G RHG	No Change

Zener Diode & Array	SOD-123	BZT52C39-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C3V0-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C3V3-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C3V6-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C3V9-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C43-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C4V3-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C4V7-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C5V1-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C5V6-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C6V2-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C6V8-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C7V5-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C8V2-G RHG	No Change
Zener Diode & Array	SOD-123	BZT52C9V1-G RHG	No Change
Zener Diode & Array	SOD-523F	BZX584B10 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B11 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B12 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B13 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B15 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B16 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B18 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B20 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B5V1 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B5V6 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B6V2 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B6V8 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B7V5 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B8V2 RSG	No Change
Zener Diode & Array	SOD-523F	BZX584B9V1 RSG	No Change