

PRODUCT / PROCESS CHANGE NOTIFICATION

Generic Announcement

PCN#2501003-AU-1 • DATE: 14th January, 2025

PCN Subject: Change Assembly Site for Package SOT-223 Series

• **PCN Change Category:**

- ☒ **Material**

 ☒ **Process**

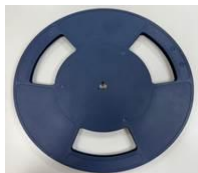
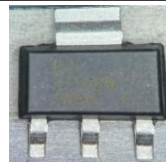
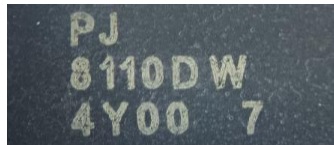
 ☐ **Data sheet / Specification**
☐ **Reliability**
☒ **Others (Change Assembly Site)**

• **Description of Change Purpose or Reason:**

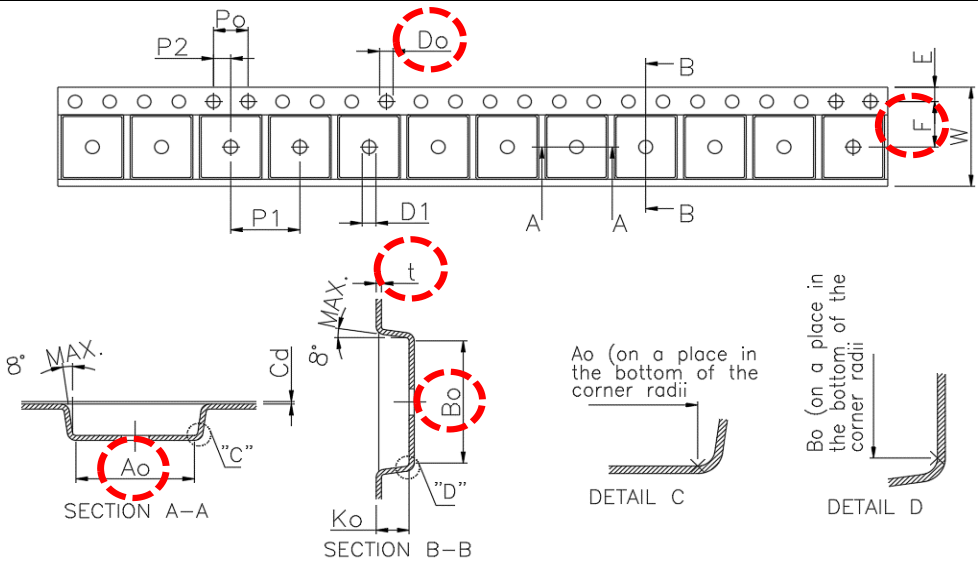
This PCN is being issued to announce the qualification of PANJIT International Inc. (located in Kaohsiung, Taiwan) as an assembly and test site for selected SOT-223 products. The products manufactured at this new assembly/test site will be form, fit, and function compatible with those from the currently qualified manufacturing sites. We also change our part number from Type_R2_000A1 to Type_R2_007A1. For more detail, please check below change information.

We recommend that you acknowledge receipt of this notification within 30 days of this PCN date. If you require samples for further evaluation, please feel free to contact your local sales representative and make a request. We are always pleased to serve you at any time.

● **Change Information:**

Comparison			From (Current)	Change to (New)
Assembly Site			Tianshui Huatian Technology Co., Ltd.	PANJIT International Inc.
Production Site Location			Gansu, China	Kaohsiung, Taiwan
Package			SOT-223	
Material	Lead Frame	Material	Copper	
	Die Attach	Material	Silver Glue	Solder Paste
	Wire	Material	Cu	
		Diameter(mil)	1.0mil / 1.2mil / 1.5mil	
	Epoxy Molding Compound	Product Name	CEL-1702HF	ELER-8 Series
	Ending Tape	Material	Paper	Polyester
		Color	White	Black
	Blue Anti-Static Plastic Reel			
Form	Appearance			
	Marking Format			
	Bottom View			

● **Change Information:**

Comparison	From (Current)	Change to (New)
Assembly Site	Tianshui Huatian Technology Co., Ltd.	PANJIT International Inc.
Carrier Tape		
Symbol (mm)	Dimension	
Ao	7.0±0.3	6.8±0.1
Bo	7.4±0.3	7.3±0.1
t	0.25±0.5	0.3±0.05
F	5.6±0.05	5.5±0.1
Do	φ1.5±0.5	φ1.55±0.05

• **Verification /Qualification Data:**

The electrical characterization and high reliability testing have been completed on representative part numbers to ensure there is no change to device functionality or electrical specifications in the datasheet. There will be no change to the Form, Fit, or Function of products affected.

• **Affected Product Type:**

Package	Function	Type	Tianshui Huatian Technology Co., Ltd.	PANJIT International Inc.
SOT-223	MOSFET	PJW3P06A-AU	PJW3P06A-AU_R2_000A1	PJW3P06A-AU_R2_007A1
SOT-223	MOSFET	PJW4N06A-AU	PJW4N06A-AU_R2_000A1	PJW4N06A-AU_R2_007A1
SOT-223	MOSFET	PJW4P06A-AU	PJW4P06A-AU_R2_000A1	PJW4P06A-AU_R2_007A1
SOT-223	MOSFET	PJW5N10-AU	PJW5N10-AU_R2_000A1	PJW5N10-AU_R2_007A1
SOT-223	MOSFET	PJW5P06A-AU	PJW5P06A-AU_R2_000A1	PJW5P06A-AU_R2_007A1
SOT-223	MOSFET	PJW7N06A-AU	PJW7N06A-AU_R2_000A1	PJW7N06A-AU_R2_007A1
SOT-223	Bipolar Junction Transistors	BCP53-16-AU	BCP53-16-AU_R2_000A1	BCP53-16-AU_R2_007A1
SOT-223	Bipolar Junction Transistors	BCP56-16-AU	BCP56-16-AU_R2_000A1	BCP56-16-AU_R2_007A1
SOT-223	Bipolar Junction Transistors	2SCA44W-AU	2SCA44W-AU_R2_000A1	2SCA44W-AU_R2_007A1

• **Effective Date : 14th July, 2025**

➤ **The reliability test results are summarized below:**

Product reliability test result: PASS

No.	DESCRIPTION	TEST CONDITION	DURATION	FAILURE RATE	
1	Temperature Cycling (TCT)	Ta = -55°C ~ +150°C (2 cycles / Hour)	1000 CYCLES	0/77 PCS	3 Lots Pass
2	Resistance to Solder Heat (RSH)	Temperature of solder pot = 260 +5/-0 °C Time for dipping in solder = 10 ±1 Sec	1 CYCLE	0/30 PCS	3 Lots Pass
3	Solderability (SD)	Temperature of solder pot = 245 ± 5°C Time for dipping in solder = 5 ± 0.5 Sec	1 CYCLE	0/10 PCS	3 Lots Pass
4	Intermittent Operational Life (IOL)	$\Delta T_j \geq 100^\circ\text{C}$ Power On: 120 sec Power Off: 120 sec	15,000 CYCLES	0/77 PCS	3 Lots Pass
5	High Temperature Reverse Bias (HTRB)	$T_j = T_j \text{ max}$, V = 80%V _R , DC supply	1000 HOURS	0/77 PCS	3 Lots Pass
6	High Temperature Gate Bias (HTGB)	$T_j \leq T_j \text{ max}$, 100%VGS	1000 HOURS	0/77 PCS	3 Lots Pass
7	Autoclave (AC)	Ta = 121°C, P = 15psig ,100%RH	96 HOURS	0/77 PCS	3 Lots Pass
8	High Humidity High Temp. Reverse Bias(H ³ TRB)	Ta = 85°C +/-2°C RH = 85% +/-5% V = 80%V _R DC Supply	1000 HOURS	0/77 PCS	3 Lots Pass

- **ELECTRICAL CHARACTERISTICS SUMMARY:**

There is no change to the product electrical specifications.

- **SAMPLES REQUEST :**

Contact your local PANJIT sales representative.

- **TECHNICAL CONTACT :**

E-mail: jwchen@panjit.com.tw

- **FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local PANJIT sales representative.

- **ADDITIONAL RELIABILITY :**

Contact your local PANJIT sales representative.

- **CHANGED PART IDENTIFICATION :**

The tracking of 1st delivery after change can be identified by production lot number. Please contact your local sales for tracking lot number.

Please refer to below Lot number rule:

Lot number: **5924XXXXX**.

1st digit "5" denotes Year 2025.

2nd digit "9" denotes September.

3rd and 4th digits denote Day.

From 5th digits (XXXXX) denotes production serial number.

Customer Acknowledgement Form

(To be filled out by the customer and returned to HQBU of PANJIT)

The indicated Customer Notification letter was received and acknowledged by the undersigned authority.

Company Name : _____

Customer Name : _____ (Signature) Date : _____

PCN Number : PCN# 2501003-AU-1

Approval for the Product/Process change: ☐Yes ☐No

Comments/Additional requests:

Thanks for your attention to this matter. Please return your acknowledgment form to our local PANJIT sales representative.

Please note that no objection within 30 days upon receiving this notification will be deemed as accepted and agreed with this Process Change Notification.