PANJIT International Inc.
NO.24 Gangshan N. Rd., Gangshan Dist., Kaohsiung City 82063, Taiwan.
TEL:886-7-621-3121 FAX:886-7-621-3129 Website: www.panjit.com.tw

PRODUCT / PROCESS CHANGE NOTIFICATION

Generic Copy

PCN#2306001-AU

- DATE: 20th June, 2023

PCN Subject: Qualification of High Density Copper Leadframe for Package SOD-123FL

- **PCN Change Category:**

■ **Material** ■ **Process** ☐ **Datasheet/Specification**

☐ **Reliability**

☐ **Others ( )**

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

With the optimizing production efficiency and process flow, PANJIT would like to notify customer the change to high density copper leadframe for selected devices of Package SOD-123FL. Along with the introduction of high density copper leadframe, the new Bill of Material(BOM), the change of de-flashing and plating process are also required. For more detail, pls refer to below change information.

The last time buy opportunity is available for current package structure for last order placement until 20th June 2024 with final shipment date of 20th December 2024.

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.

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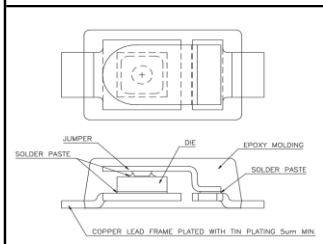
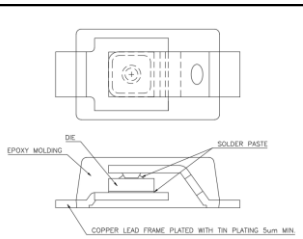
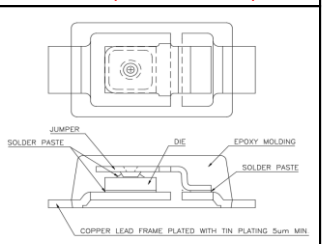
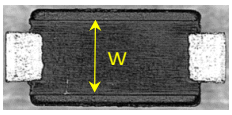
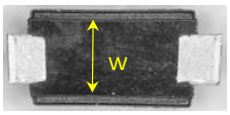
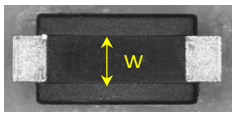
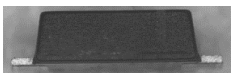
• Change Information:

Change category		From (Current)		Change to (New)
Lead Frame	Supplier	LeFram Technology Corp. JIH LIN TECHNOLOGY CO., LTD	LeFram Technology Corp.	JIH LIN TECHNOLOGY CO., LTD
Package Structure		Three pieces with Clip	Two pieces	High Density Three pieces with Clip
				
Appearance	Top view			
	Back view			
	Side view			
Wafer Change Information		Refer to Table 1,2,3,4		
Molding Compound	Supplier	E'dale Technology Co., LTD.		SUMITOMO BAKELITE COMPANY LIMITED
	Type	ELER-8-500C-4		EME-G600FL
Process	De-gate	Punch		Laser
	De-flash	Electrolytic De-flash		Chemical De-flash
	Plating	Rack Plating		Strip Plating

• Wafer Change Information:

Comparison Table	Table 1		Table 2	
Package Structure	From (Current)	Change to (New)	From (Current)	Change to (New)
	Three pieces with Clip	High Density Three pieces with Clip	Three pieces with Clip	High Density Three pieces with Clip
Wafer Thickness(um)	No change		300 310	250

Comparison Table	Table 3		Table 4	
Package Structure	From (Current)		Change to (New)	From (Current)	Change to (New)
	Three pieces with Clip	Two pieces	High Density Three pieces with Clip	Two pieces	High Density Three pieces with Clip
Wafer Thickness(um)	300	250	250	No change	

- **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:**

Affected Product Type: Refer to below Table1~4.

- **Effective Date：20th** December, 2023

- **Last Order Date：20th** June, 2024
- **Last Shipment Date：20th** December, 2024

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➢ 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℃ ~ +150℃ (2 cycles / Hour)	1000 CYCLES	0/77 PCS	3 LOTS PASS
2	High Temperature Storage Test (HTSL)	Ta = 150℃	1000 HOURS	0/77 PCS	3 LOTS PASS
3	Resistance to Solder Heat (RSH)	Temperature of solder pot = 260+5/-0℃ Time for dipping in solder = 10 ±1 Sec	1 CYCLE	0/30 PCS	3 LOTS PASS
4	High Temperature Reverse Bias (HTRB)	Ta = 140℃ , VR = 100%VB, DC supply	1000 HOURS	0/77 PCS	3 LOTS PASS
5	Autoclave (AC)	Ta = 121℃, P = 29.7psia ,100%RH	96 HOURS	0/77 PCS	3 LOTS PASS
6	High Humidity High Temp. Reverse Bias(H3TRB)	Ta = 85℃ +/-2℃ RH = 85% +/-5% VR = 80%VB DC Supply	1000 HOURS	0/77 PCS	3 LOTS PASS
7	Intermittent Forward Operation Life (I.O.L)	△Tj≧100℃, Power On: 2 mins ; Power Off: 2 mins.	15000 CYCLES	0/77 PCS	3 LOTS PASS
8	Temperature Humidity Storage (THS)	Ta=85℃ , RH=85%	1000 CYCLES	0/77 PCS	3 LOTS PASS
9	Solder ability (SD)	Temperature of solder pot = 245 ±5℃ Time for dipping in solder = 5 ±0.5 Sec	1 CYCLE	0/10 PCS	3 LOTS PASS

- **ELECTRICAL CHARACTERISTICS SUMMARY:**

  There is no change to the product electrical specifications.

- **SAMPLES NEED：**

  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: **2924XXXXX.**

  1st digit “2” denotes Year 2022.
  2nd digit “9” denotes September.
  3rd and 4th digits denote Day.

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

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- **Affected Product Type:**

Table 1

Function: Fast Recovery Rectifiers					
RS1006FL-AU	RS1008FL-AU				
Function: General Purpose Rectifiers					
GS1000FL-AU	GS1001FL-AU	GS1002FL-AU	GS1004FL-AU	GS1006FL-AU	GS1010FL-AU
Function: SCHOTTKY					
MB2H60AL-AU	SBA230AL-AU	SBA340AL-AU			
Function: Super Fast Recovery Rectifiers					
ES1006FL-AU					
Function: Ultra Fast Recovery Rectifiers					
US1008FL-AU					

Table 2

Function: SCHOTTKY					
MBR1020VL-AU	SS1020FL-AU	SS1030FL-AU	SS1040FL-AU	SS2030FL-AU	SS2040FL-AU
SS2060FL-AU	SS3040FL-F-AU	ES1002FL-AU			

Table 3

Function: Super Fast Recovery Rectifiers					
SMF9.0A-AU					

- **Affected Product Type:**

Table 4

Function: Fast Recovery Rectifiers					
RS1002FL-AU	RS1004FL-AU	RS1010FL-AU			
Function: General Purpose Rectifiers					
GS1004FL-AU	GS1008FL-AU	GS1502FL-AU	GS1504FL-AU	GS1506FL-AU	GS1510FL-AU
Function: SCHOTTKY					
MB160AL-AU	MB1H60AL-AU	SBM260VAL-AU	SS10100FL-AU	SS10150FL-AU	SS1060FL-AU
SS1060XFL-AU	SS20100FL-AU				
Function: Super Fast Recovery Rectifiers					
MER2DAL-AU					
Function: Transient Voltage Suppressors					
P2AL10A-AU	P2AL11A-AU	P2AL12A-AU	P2AL13A-AU	P2AL14A-AU	P2AL15A-AU
P2AL16A-AU	P2AL17A-AU	P2AL18A-AU	P2AL20A-AU	P2AL22A-AU	P2AL24A-AU
P2AL26A-AU	P2AL28A-AU	P2AL3.3A-AU	P2AL30A-AU	P2AL33A-AU	P2AL36A-AU
P2AL40A-AU	P2AL5.0A-AU	P2AL6.0A-AU	P2AL6.5A-AU	P2AL7.0A-AU	P2AL7.5A-AU
P2AL8.0A-AU	P2AL8.5A-AU	P2AL9.0A-AU	P4FL10A-AU	P4FL11A-AU	P4FL12A-AU
P4FL13A-AU	P4FL14A-AU	P4FL15A-AU	P4FL16A-AU	P4FL17A-AU	P4FL18A-AU
P4FL20A-AU	P4FL22A-AU	P4FL24A-AU	P4FL26A-AU	P4FL28A-AU	P4FL3.3A-AU
P4FL30A-AU	P4FL33A-AU	P4FL36A-AU	P4FL40A-AU	P4FL43A-AU	P4FL45A-AU
P4FL48A-AU	P4FL5.0A-AU	P4FL51A-AU	P4FL54A-AU	P4FL58A-AU	P4FL6.0A-AU
P4FL6.5A-AU	P4FL60A-AU	P4FL64A-AU	P4FL7.0A-AU	P4FL7.5A-AU	P4FL8.0A-AU
P4FL8.5A-AU	P4FL9.0A-AU	SMF10A-AU	SMF11A-AU	SMF12A-AU	SMF14A-AU
SMF150A-AU	SMF15A-AU	SMF16A-AU	SMF18A-AU	SMF22A-AU	SMF24A-AU
SMF26A-AU	SMF28A-AU	SMF30A-AU	SMF33A-AU	SMF36A-AU	SMF40A-AU
SMF51A-AU	SMF64A-AU	SMF8.5A-AU			
Function: Ultra Fast Recovery Rectifiers					
US1002FL-AU	US1004FL-AU	US1006FL-AU			
Function: ZENER Diodes					
BZD27C10P-AU	BZD27C11P-AU	BZD27C16P-AU	BZD27C17P-AU	BZD27C20P-AU	BZD27C28P-AU
BZD27C36P-AU	BZD27C39P-AU	BZD27C5V6P-AU	BZD27C6V0P-AU	PZ1AL10B-AU	PZ1AL11B-AU
PZ1AL12B-AU	PZ1AL13B-AU	PZ1AL14B-AU	PZ1AL15B-AU	PZ1AL16B-AU	PZ1AL17B-AU
PZ1AL18B-AU	PZ1AL19B-AU	PZ1AL20B-AU	PZ1AL22B-AU	PZ1AL24B-AU	PZ1AL25B-AU
PZ1AL27B-AU	PZ1AL28B-AU	PZ1AL30B-AU	PZ1AL33B-AU	PZ1AL36B-AU	PZ1AL39B-AU
PZ1AL3V6B-AU	PZ1AL3V9B-AU	PZ1AL43B-AU	PZ1AL47B-AU	PZ1AL4V3B-AU	PZ1AL4V7B-AU
PZ1AL51B-AU	PZ1AL56B-AU	PZ1AL5V1B-AU	PZ1AL5V6B-AU	PZ1AL62B-AU	PZ1AL68B-AU
PZ1AL6V0B-AU	PZ1AL6V2B-AU	PZ1AL6V8B-AU	PZ1AL75B-AU	PZ1AL7V5B-AU	PZ1AL8V2B-AU
PZ1AL8V7B-AU	PZ1AL9V1B-AU				

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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# 2306001-AU

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

Comments/Additional requests:

_____

_____

_____

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

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