

PRODUCT / PROCESS CHANGE NOTIFICATION

Generic Announcement

PCN#2512004

• DATE: 30th December, 2025

PCN Subject: Additional Wire Bond Material for Selected Products

• **PCN Change Category:**

- ☒ **Material**

 ☐ **Process**

 ☐ **Data sheet / Specification**
☐ **Reliability**
☐ **Others ()**

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

This PCN is issued to inform customers that, in order to ensure continuity of supply, PANJIT has completed the qualification of copper (Cu) wire bonding for selected products.

Compared to gold wire, copper wire offers lower electrical resistivity and superior thermal conductivity. In addition, certain mechanical properties of copper wire are superior to those of gold wire, which help to achieve more stable wire looping control and enhance bonding strength and reliability during the assembly process.

Furthermore, copper wire bonding is already a primary and mature technology at PANJIT. This wire material change further enables the integration of in-house production materials, streamlined manufacturing operations, and unified raw material management.

PANJIT has extensive experience in copper wire bonding manufacturing. Based on the material characteristics of copper wire, rigorous process design and control methodologies have been established to ensure consistent and stable product quality.

All copper wire bonded products have successfully passed process qualification and reliability validation. This implementation will not impact the form, fit, or function of the affected products.

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:**

Wire Comparison	Current	Add
Wire Supplier	Heraeus Materials Singapore Pte. Ltd. Tanaka Electronics Singapore (PTE.) Ltd.	Heraeus Materials Malaysia Sdn Bhd. Taiwan Tanaka Kikinzoku Kogyo Co., Ltd.
Production Site Location	Singapore Singapore	Malaysia Taiwan
Material	Gold Wire	Copper Wire

• **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.

• **Effective Date : 30th March, 2026**

• **Affected Product Type:**

Function: MOSFET					
2N7002(A)	2N7002K	2N7002KTBS	2N7002K-VGS	2N7002KW-S	2N7002TB
BSS138	BSS84	BSS8402DW	BSS84DW	BSS84H	BSS84W
PJA138L	PJC138L	PJC7412	PJE138K	PJE8400	PJE8401
PJE8404	PJE8405	PJE8406	PJT138L	PJT7812	PJX8803
PJX8804	PJX8805	PJX8806	PJX8856		
Function: SCHOTTKY					
1SS388	BAS100ATB6	BAT42WS	BAT43WS	RB520S30	SD103AWSH
Function: Small Signal Switching Diodes					
1N4148WSP					
Function: Bipolar Junction Transistors					
BC807DS	BC817DPN-25				
Function: ESD Protection					
PE1605C2A	PE3324C2A	PE4105C1ES	PE4105C2A	PEC3202C2E	PEC3202ES
PEC3203C2E	PEC3203ES	PEC3205C2E	PEC3205ES	PJE36HWS	PJE36HWSP
PJESD6V8LC-5W	PJET3V3TS	PJQA5V6	PJSOT05C	PJSOT15	PJSOT24C
PJSOT24C-02	PJSOT24C-03	PJSOT24CH	PJSRV05-4		
Function: ZENER Diodes					
AZ23C5V6P	BZT52-B5V1	BZT52-B5V8S	BZX584B5V1	BZX584B5V6	BZX584B8V2
BZX584C8V2	BZX84C2V4TW	BZX84C2V7TW	BZX84C3TW	BZX84C3V9TW	BZX84C4V7TW
MMBZ5237B	MMBZ5240B	MMBZ5242B	MMSZ5231B	MMSZ5247B	PZ16B
PZD22B10C	PZD22B11C	PZD22B12C	PZD22B13C	PZD22B14C	PZD22B15C
PZD22B16C	PZD22B17C	PZD22B18C	PZD22B20C	PZD22B22C	PZD22B24C
PZD22B27C	PZD22B28C	PZD22B2V4C	PZD22B2V7C	PZD22B30C	PZD22B33C
PZD22B36C	PZD22B39C	PZD22B3V0C	PZD22B3V3C	PZD22B3V6C	PZD22B3V9C
PZD22B43C	PZD22B47C	PZD22B4V3C	PZD22B4V7C	PZD22B51C	PZD22B56C
PZD22B5V1C	PZD22B5V6C	PZD22B62C	PZD22B68C	PZD22B6V2C	PZD22B6V8C
PZD22B75C	PZD22B7V5C	PZD22B8V2C	PZD22B8V7C	PZD22B9V1C	PZS1110BES
PZS1111BES	PZS1112BES	PZS1113BES	PZS1114BES	PZS1115BES	PZS1116BES
PZS1117BES	PZS1118BES	PZS1119BES	PZS1120BES	PZS1122BES	PZS1124BES
PZS1125BES	PZS1127BES	PZS1128BES	PZS1130BES	PZS1133BES	PZS1136BES
PZS1139BES	PZS113V9BES	PZS1143BES	PZS114V3BES	PZS114V7BES	PZS115V1BES
PZS115V3BES	PZS115V6BES	PZS116V2BES	PZS116V8BES	PZS117V5BES	PZS118V2BES
PZS118V7BES	PZS119V1BES	STZ23C5V6TB	STZ23C5V6WS		

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

Product reliability test result: PASS

No.	DESCRIPTION	TEST CONDITION	DURATION	FAILURE RATE	
1	High Temperature Reverse Bias (HTRB)	$T_j \leq T_j \text{ max}$, $V = 80\%V_R$, DC supply	1000 HOURS	0/77 PCS	3 Lots Pass
2	Temperature Cycling (TCT)	$T_a = -55^\circ\text{C} \sim +150^\circ\text{C}$ (2 cycles / Hour)	1000 CYCLES	0/77 PCS	3 Lots Pass
3	Intermittent Operational Life (IOL)	$\Delta T_j \geq 100^\circ\text{C}$ Power On: 120 sec Power Off: 120 sec	15000 CYCLES	0/77 PCS	3 Lots Pass
4	Resistance to Solder Heat (RSH)	Temperature of solder pot = $260 \pm 5/-0^\circ\text{C}$ Time for dipping in solder = $10 \pm 2/-0$ Sec	1 CYCLE	0/30 PCS	3 Lots Pass
5	High Humidity High Temp. Reverse Bias(H ³ TRB)	$T_a = 85^\circ\text{C} \pm 2^\circ\text{C}$ RH = 85% $\pm 5\%$ $V = 80\%V_R$ 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: **6326XXXXX**.

1st digit "6" denotes Year 2026.

2nd digit "3" denotes March.

3rd and 4th digits denote Day.

Lot number: **6 3 2 6 X X X X X**

1st digit "6" denotes Year 2026.

2nd digit "3" denotes March.

3rd and 4th digits denote Day.

Denotes the 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# 2512004

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.