



8755 W. Higgins Road
Suite 500
Chicago, Illinois USA 60631

April 16th, 2024

RE: PCN # ESU270-91- New Wafer Foundry approval for SP1012-05WTG

To our valued customer,

Littelfuse would like to notify you that we are going to add a new wafer foundry for SP1012-05WTG due to current wafer fab unavailability. There are no changes to fit, form, and function of finished product.

The affected product will be fully qualified in accordance with established performance and reliability criteria. Samples would be provided upon your request.

Form, fit, function changes: None
Part number changes: None
Effective date: April 26th, 2024 or sooner
Replacement products: N/A
Last time buy: N/A

This PCN is for your information and acknowledgement. If you have any other questions or concerns, please contact your local sales team or product team below for further assistance.

We value your business and look forward to assisting you whenever possible.

Best Regards,

Sophia Hu
TVS Diode Array Assistant Product Manager
Semiconductor Business Unit, Wuxi, China
+86 510 85277701 - 7653
shu@littelfuse.com



800 E. Northwest Highway Des Plaines, IL 60016

Product/Process Change Notice (PCN)

PCN# :

ESU270-91 Date: April 26th, 2024.

Product Identification:

Additional wafer foundry approval for SP1012-05WTG.

Implementation Date for Change:

April 26th, 2024 or sooner

Contact Information

Name : Sophia Hu

Title : Assistant Product Marketing Manager

Phone # : +86 13771377277

Fax# : N/A

E-mail : shu@littelfuse.com

Category of Change:

- ☐ Assembly Process
- ☐ Data Sheet
- ☐ Technology
- ☐ Discontinuance/Obsolescence
- ☐ Equipment
- ☒ Manufacturing Site
- ☒ Raw Material
- ☐ Testing
- ☐ Fabrication Process
- ☐ Other: _____

Description of Change:

Additional wafer foundry approved for SP1012-05WTG SPA™ TVS Diode Arrays products. There are no changes to fit, form, function of the finished product.

Important Dates:

- ☒ Qualification Samples Available: Upon request
- ☒ Final Qualification Data Available: Upon request
- ☐ Date of Final Product Shipment:

☐ Last Time Buy:

Method of Distinguishing Changed Product

- ☐ Product Mark,
- ☒ Date Code,
- ☐ Other, Littelfuse internal work order documentation

Demonstrated or Anticipated Impact on Form, Fit, Function or Reliability:

N/A

LF Qualification Plan/Results:

Yes

Customer Acknowledgement of Receipt: Littelfuse requests you acknowledge receipt of this PCN. In your acknowledgement, you can grant approval or request additional information. Littelfuse will assume the change is acceptable if no acknowledgement is received within 30 days of this notice. Lack of any additional response within 90 days of PCN issuance further constitutes acceptance of the change.



PCN Report

ETR # Various

Prepared By : Light Hsieh-Product Engineering Manager, Raider Chen-Product Engineer,
Sophia Hu- Assistant Product Manager
Date : 2024/4/11
Device : SP1012-05WTG
Revision : A

1.0 Objective:

Qualify a new wafer foundry for SP1012-05WTG. Summarize the physical items, electrical characteristics, and reliability results of qualification lots.

2.0 Applicable Devices:

2.1 **Product name:** SP1012-05WTG

3.0 Assembly, Process & Material Differences/Changes:

3.1 **Assembly Changes:**

No change of assemble process.

3.2 **Process Changes:**

No change of process method.

3.3 **Material Change:**

Wafer change.

4.0 Packing Method

No change of packing method.

5.0 Physical Differences/Changes:

No change of physical.

6.0 Reliability Test Results Summary:

6.1 **Reliability summary report:**

Test Items	Condition	S/S	Results	ETR #
Pre-conditioning (PC)	JESD22-A113	77 each lot	0/231	TR24-04-007977 TR24-04-007978 TR24-04-007979
DC Blocking (HTRB)	Bias = VRWM, Ta = 150°C, Duration = 504 Hours	77 each lot	0/231	
Temperature Cycle (TC)	Ta = -55°C to 150°C, Duration = 500 Cycles	77 each lot	0/231	
Solderability (SD)	ANSI-J-STD-002	10 each lot	0/70	

7.0 Electrical Characteristic Summary:

Electrical performances were comparable and characterization data is available upon request.

8.0 Changed Part Identification:

Identified by date code.

9.0 Approvals:

Sophia Hu
SPA Assistant Product Manager
Littelfuse, Wuxi

Light Hsieh
SPA Product Engineering Manager
Littelfuse, HsinChu

Raider Chen
SPA Product Engineer
Littelfuse, HsinChu