

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

Feb 10<sup>th</sup>, 2021

# RE: PCN # ESU270-59 - SP8008-08UTG additional backend location approval

To our valued customers,

Littelfuse would like to notify you of an additional approved backend location for SP8008-08UTG TVS Diode Array (SPA® Diodes) product. This new additional backend factory in China is fully approved for all assembly, test, and packing operations. There are no changes to fit, form, and function of the finished product.

Qualification efforts are complete, and the new factory is ramping for shipments. Please see the documentation in the following pages for change details.

The affected product has been fully qualified in accordance with established performance and reliability criteria. Full qualification data and/or samples will be available upon request.

Form, fit, function changes: None Part number changes: None Effective date: Feb 15<sup>th</sup>, 2021 Replacement products: N/A Last time buy: N/A

This notification is for your information and acknowledgement. If you have any other questions or concerns, please contact Sophia Hu, Assistant Product Manager.

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 <u>shu@littelfuse.com</u>

PCN# :	Contact Information					
ESU270-59 Date: Feb 10 <sup>th</sup> , 2021	Name: Sophia Hu					
Product Identification :	Title: Assistant Product Manager					
SP8008-08UTG TVS Diode Array Product	Phone # : +86 13771377277					
additional backend location approval	Fax# : N/A					
Implementation Date for Change:	E-mail : shu@littelfuse.com					
Feb 15 <sup>th</sup> , 2021						
Category of Change: De	escription of Change:					
Assembly Process Ap	pprove additional backend assembly, test, and packing locations for					
	P8008-08UTG. There are no changes to fit, form & function of the finished					
Technology pr	oduct.					
Discontinuance/Obsolescence						
Equipment						
Manufacturing Site						
🖾 Raw Material						
Testing						
Fabrication Process						
□ Other:						
Important Dates:						
Qualification Samples Available: Availa	ble 🗌 Last Time Buy:					
Final Qualification Data Available: Avai	lable					
Date of Final Product Shipment:						
Method of Distinguishing Changed Produ	ict					
Product Mark, See (8.0) in the succeeding PCN report for details						
Date Code,						
☐ Other,						
Demonstrated or Anticipated Impact on F	orm, 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 9	of this notice. Lack of any additional response within 90 days of PCN issuance further constitutes acceptance of the change.					



Prepared By: Sophia Hu-SPA Assistant Product Manager, Jordan Hsieh-Product Engineering Manager,<br/>Raider Chen-Product Engineer, Sophia Hu-Associate Product ManagerDate: 2021/2/5Device: SP8008-08UTGRevision: A

### 1.0 **Objective:**

The purpose of this document is to qualify an additional assembly supplier for SP8008-08UTG. Summarize the physical, electrical and reliability test performed in qualification lots.

#### 2.0 Applicable Devices:

#### SP8008-08UTG

#### 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

SP8008-08UTG							
Item	Original	New	Change or not				
Die Attach Material	8008MD	8008MD	No				
Wire	Gold	Gold	No				
Mold Compound	CEL9220HF13	CEL9220HF13	No				
Plating	PPF	Matte Tin	Yes				

#### 4.0 Packing Method

No change of packing method.

## 5.0 Physical Differences/Changes:

No change of this item.

#### 6.0 Reliability Test Results Summary:

## 6.1 SP8008-08UTG summary report:

Test Items	Condition	S/S	Results	ETR #	
Pre-conditioning (PC)	JESD22-A113	308 each lot	0/924		
DC Blocking (HTRB)	Bias = VRWM, Ta = 150°C, Duration = 1008 Hours	77 each lot	0/231		
Temperature Cycle (TC)	Ta = -55°C to +150°C, Duration = 1000 Cycles	77 each lot	0/231		
Temperature/Humidity (H3TRB)	Ta = 85°C, 85% RH, Bias = VRWM, Duration = 1008 Hours	77 each <mark>l</mark> ot	0/231	151436 151437	
Autoclave (AC)	Ta = 121°C, 100%RH, 2ATM, Duration = 96 Hours	77 each lot	0/231	151437	
Resistance to Solder Heat (RSH)	260°C, 10 sec, M-2031	10 each lot	0/30		
Moisture Sensitivity Level (MSL)	Per Jedec J-STD-020D Level 1	308 each lot	0/924		
Solderability (SD)	ANSI-J-STD-002	10 each lot	0/30		

## 7.0 Electrical Characteristic Summary:

No change in electrical characteristics. Characterization data is available upon request.

## 8.0 Changed Part Identification:

Both were qualified suppliers and it can be identified by code of CAT NO on the label.

	-		
(P)PART NO: PSPXXXX-XXXX		HF	Pb- FREE
PART DESCRIPTION	CAT NO: *		
(Q)Q'TY: [QXXXX]	(K)PO NO: KXXXXXX		
(1T)LOT NO:			
(1T)LOT NO:(When nec 1TXXXXXX	essary)		
	Y OF ORIGIN" <u>COUNTRY</u> "	DATE COD	E(MM/DD/YY)

9.0 Approvals:

Sophia Hu SPA Assistant Product Manager Littelfuse, Wuxi Jordan Hsieh SPA Product Manager Littelfuse, HsinChu Raider Chen SPA Product Engineer Littelfuse, HsinChu