

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

May 21st, 2021

RE: PCN # ESU270-64 -AQ3130-01ETG additional backend location approval

To our valued customers,

Littelf use would like to notify you of an additional approved backend location for AQ3130-01ETG TVS Diode Array (SPA® Diodes) product. This new 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 completed, new factory is online for immediate 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: August 20th, 2021 or sooner

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
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shu@littelfuse.com

PCN#:	Contact Information			
ESU270-64 Date: May 21 st , 2021	Name: Sophia Hu			
Product Identification :	Title: Assistant Product Manager			
AQ3130-01ETG additional backend location approval	Phone #: +86 13771377277			
Implementation Date for Change:	Fax#: N/A			
August 20 th , 2021 or sooner	E-mail: shu@littelfuse.com			
Category of Change:	Description of Change:			
□ Assembly Process				
Data Sheet	Approve an additional backend assembly, test, and packing location for AQ3130-01ETG. There are no changes to fit, form			
☐ Technology	& function of the finished product.			
□ Discontinuance/Obsolescence				
☐ Equipment				
☐ Testing				
☐ Fabrication Process				
□ Other:				
Important Dates:				
☐ Qualification Samples Available: Available	☐ Last Time Buy:			
☐ Final Qualification Data Available: Available				
☐ Date of Final Product Shipment:				
Method of Distinguishing Changed Product				
☐ Product Mark, See (8.0) in the succeeding PCN report for details				
☐ Date Code,				
☐ Other,				
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.				



Prepared By : Jordan Hsieh-Product Engineering Manager,

Raider Chen-Product Engineer, Sophia Hu-Associate Product Manager

Date : 2021/5/12 **Device** : AQ3130-01ETG

Revision : A

1.0 Objective:

The purpose of this document is to qualify an additional assembly supplier for AQ3130-01ETG. Summarize the physical, electrical and reliability test performed in qualification lots.

2.0 Applicable Devices:

2.1 Product name: AQ3130-01ETG

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

AQ3130-01ETG						
Item	Original	New	Change or not			
Lead frame	C7025	Eftect64T	Yes			
Die Attach Material	8006NS	8006NS	No			
Wire	Gold	Gold	No			
Mold Compound	CEL-9220HF10	G770HCD	Yes			
Plating	PPF	PPF	No			

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 AQ3130-01ETG summary report:

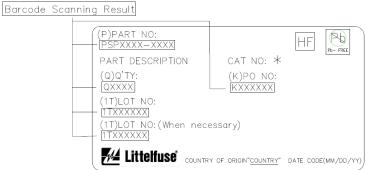
Test Items	Condition	S/S	Results	ETR#
Pre-conditioning (PC)	JESD22-A113	308 each lot	0/924	
DC Blocking (HTRB)	Bias = VRWM, Ta = 150°C, Duration = 1008 Hours	77 each lot	0/231	79803 78492 155379
Temperature Cycle (TC)	Ta = -55°C to $+150$ °C, Duration = 1000 Cycles	77 each lot	0/231	
Temperature/Humidity (H3TRB)	Ta = 85°C, 85% RH, Bias = VRWM, Duration = 1008 Hours	77 each lot	0/231	
Autoclave (AC)	Ta = 121°C, 100%RH, 2ATM, Duration = 96 Hours	77 each lot	0/231	
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.



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