

To: Littelfuse Sales, Sales Support & Valued Customers

From: Littelfuse Product Management – Industrial Business Unit

Subject: Design Update – Overlay Removal for SPXI/SPXV 4–5A Fuses

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Date: Rev 03/06/2026

Dear Customer,

Littelfuse would like to inform you about a design improvement in the manufacturing process of the **SPXI/SPXV series for amperage ratings 4 to 5A, 1500 Vdc fuses**. As part of our continuous commitment to quality and process optimization, we have removed the internal overlay element from the fuse construction.

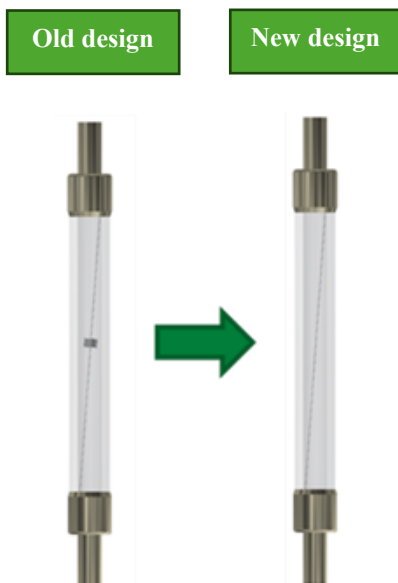
This update simplifies the internal design and improves manufacturing robustness, while fully maintaining the product's established performance, safety, and reliability standards.

As a result of this enhancement

- Small variations in some electrical characteristics have been observed (see *Image 2 for the 5A example*).
- *Image 3* provides a comparison of the characteristics referenced above for the 4–5A range.

All measured values remain within published product specifications and certification limits. Implementation timing will vary across part numbers (see **Annex B** for details).

Please note that this change does **not** affect the **Fit, Form, or Function** of the fuse. All updated units have passed internal validations including UL testing confirming no significant impact to product behavior or application performance



Comparative results:		
Design Features	Old Design	New Design
Ampere Rating	5A	5A
Voltage Rating (DC/UL)	1500 V	1500 V
Interrupting Rating (DC)	30 000 A	30 000 A
Environmental	RoHS	RoHS
Style	Solar	Solar
Temperature rise (Contacts)	44.5 °C	41.1 °C
135% Overload Opening time (CT sec)	217.1	227
200% Overload Opening time (CT sec)	11.3	1.36
Current Cycling (UL)	+3000 cycles	+3000 cycles
Watt loss at 80%	AVG 1.6	AVG 1.6
Watt loss at 100%	AVG 3.0	AVG 3.0

*Image 2: Comparative overview of the 5A fuse electrical parameters, provided as a reference for the design enhancement”*

“Reference image illustrating the design change for the 5A fuse”

Part Numbers affected	Old Characteristics			New Characteristics		
	Nominal cold resistance range (ohm)	Watt Loss at 100% Rated Current (W)	Watt Loss at 80% Rated Current (W)	Nominal cold resistance range (ohm)	Watt Loss at 100% Rated Current (W)	Watt Loss at 80% Rated Current (W)
SPXV004.LXCN SPXI004.LXCN	0.1044 – 0.1413	2.960	1.650	0.0906 – 0.1227	2.99	1.58
SPXI005.LXCN SPXI005.LXMCN SPXV005.LXCN	0.0646 – 0.0874	3.010	1.660	0.0547 – 0.0740	3.04	1.59

Image 3: “Comparison of old and new characteristics for the 4–5A fuses (illustrative)”

**Effective Date:** March 06, 2026

**Implementation Type:** Immediate. Running change (**Annex B**).

**Reference:** Please see Annex A for the list of affected part numbers.

This optimization reflects our dedication to continuous improvement and responsible design evolution. We appreciate your continued trust and partnership.

If you have any questions or require further information, please contact your dedicated Littelfuse representative.

Sincerely,

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## **Annexure A**

SPXI004.LXCN
SPXV004.LXCN
SPXI005.LXCN
SPXI005.LXMCN
SPXV005.LXCN

## Annex B

Part number	Implementation Date			
	Mar-26	Apr-26	May-26	Jun-26
<i>SPXI004.LXCN</i>	*	*	*	OK
<i>SPXV004.LXCN</i>	*	*	*	OK
<i>SPXI005.LXCN</i>	*	*	*	OK
<i>SPXI005.LXMCN</i>	*	*	*	OK
<i>SPXV005.LXCN</i>	*	*	*	OK