



PRODUCT CHANGE NOTIFICATION

GAS DISCHARGE TUBES



2027-xx-SM Precision Gas Discharge Tube Surge Protector

Change to Manufacturing Location, Design and Materials

Riverside, California – July 1, 2026 – As part of Bourns' strategic initiative to strengthen its global manufacturing footprint, production of the 2027-xx-SM Precision Gas Discharge Tube Surge Protector will transition to an expanded manufacturing location, effective January 4, 2027. This initiative re-flects the consolidation of production within Bourns' existing manufacturing network, improving operational efficiency and reinforcing supply chain resilience to better serve our customers' evolving demand. A list of affected part numbers is included at the end of this document.

The country of origin for the 2027-xx-SM Precision Gas Discharge Tube Surge Protector will change from Costa Rica to China. The product incorporates a revised design and updated materials aligned with the capabilities and processes of the new manufacturing location. As a result, the form, fit and function will change. Established and standardized quality controls, lot traceability, and continuous monitoring processes across Bourns' manufacturing locations ensures that the quality and reliability of the affected parts will remain unchanged.

The form, fit, and function are changing because the 2027-xx-SM Precision Gas Discharge Tube Surge Protector will have updated electrical and mechanical specifications due to part changes associated with the location change. These updated specifications are provided in the Electrical and Mechanical Specifications Changes Table and Impulse Sparkover Specification Changes Table at the end of this document.

These changes have been validated through Bourns' qualification processes, in alignment with applicable industry standards and market requirements. Bourns recommends that customers test the affected part numbers in their specific applications to verify satisfactory performance.

There are no changes to the Bourns® part numbering scheme, branding, safety certification or applicable test methods (ITU-T K.12, IEEE C62.31, IEC 61643-311) for the part numbers listed below.

Parts manufactured prior to January 4, 2027, will reflect the current specifications, while the updated values will apply to all shipments from that date forward.

Implementation dates are as follows:

Date that manufacturing of products at the current location will cease: **December 18, 2026**

Date that deliveries of products manufactured at the new site will begin: **January 4, 2027**

First date code using the above changes: **2601**

Bourns may fulfill orders for part numbers listed in Affected Part Number table from either the current or the new manufacturing site until then existing supply from the current location is exhausted. During this transition period, shipments will reflect the specifications of the producing site, and customers can identify the source through the lot code and date code on each shipment.

Users should verify that the described changes will not impact the performance of the product in their specific applications.

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Bourns will support customers throughout implementation of this transition. Product samples and technical documentation are available. Additional information can be obtained through Customer Service or Inside Sales.

Affected Part Numbers

2027-07-SMLF	2027-15-SM-RPLF	2027-23-SM-RP2LF	2027-30-SM-RP3LF	2027-42-SMLF	2027-60-SM-RP3LF
2027-07-SM-RP3LF	2027-15-SM-RP2LF	2027-23-SM-RP3LF	2027-35-SMLF	2027-42-SM-RPLF	2027-60-SM-RP2LF
2027-07-SM-RP2LF	2027-15-SM-RP3LF	2027-25-SMLF	2027-35-SM-RPLF	2027-42-SM-RP2LF	2027-60-SM-RPLF
2027-07-SM-RPLF	2027-20-SMLF	2027-25-SM-RP2LF	2027-35-SM-RP2LF	2027-42-SM-RP3LF	
2027-09-SMLF	2027-20-SM-RPLF	2027-25-SM-RPLF	2027-35-SM-RP3LF	2027-47-SMLF	
2027-09-SM-RPLF	2027-20-SM-RP2LF	2027-25-SM-RP3LF	2027-40-SMLF	2027-47-SM-RPLF	
2027-09-SM-RP2LF	2027-20-SM-RP3LF	2027-30-SMLF	2027-40-SM-RPLF	2027-47-SM-RP2LF	
2027-09-SM-RP3LF	2027-23-SMLF	2027-30-SM-RPLF	2027-40-SM-RP2LF	2027-47-SM-RP3LF	
2027-15-SMLF	2027-23-SM-RPLF	2027-30-SM-RP2LF	2027-40-SM-RP3LF	2027-60-SMLF	

Electrical and Mechanical Specifications Changes

Specification	Model	Previous Specification	New Specification
Electrical	DC Sparkover @ 100 V/s	(+/-) 15% V	(+/-) 20% V
Electrical	Impulse Sparkover @ 1000 V/us	Typical	Maximum
Electrical	Impulse Sparkover @ 1000 V/us	Check Impulse Specification Changes table	Check Impulse Specification Changes table
Electrical	Impulse Sparkover @ 100 V/us	Check Impulse Specification Changes table	Check Impulse Specification Changes table
Electrical	Discharge Current 10/1000µs	500 A@400 op	100 A@500 op
Electrical	Impulse Discharge Current 10/700 µs 500 operations	100A	To be excluded form TDS
Electrical	Glow-Arc Transition Current	< 0.5 A	1A
Electrical	DC Holdover Voltage 135 V 52 V (2035-09) 80 V (2035-15)	< 150 ms	< 150 ms 52 V (2027-70 to 2027-150) 80 V (2027-230)
Electrical	Capacitance	<1 pF	<1.5 pF
Electrical	IR	10 GΩ	1 GΩ
Electrical	AC Discharge Current 1 op	65 A, 11 cycles 1 op	65 A, 9 cycles 1 op
Mechanical	Length (mm)	6.4 +/-0.3	6.0 +/-0.2
Mechanical	Diameter (mm)	8.0 +/-0.2	8.3 +/-0.15
Mechanical	Square electrode thickness (mm)	0.76 +/-0.08	0.5 +/-0.1
Packaging	Reel color	Black	Blue
Packaging (Bulk)	2027-xx-SMLF	Bag 250 Units Box 1000 units	PVC Tray 100 units Box 500 units
Visual marking	Ink Color	White/Blue	Blue shade variation

Impulse Sparkover Specification Changes

Model No.	Impulse Sparkover 100 V/μs		Impulse Sparkover 1000 V/μs	
	Previous (typical)	New (maximum)	Previous (typical)	New (maximum)
2027-07	300 V	500 V	500 V	600 V
2027-09	300 V	500 V	500 V	600 V
2027-15	350 V	500 V	575 V	700 V
2027-20	400 V	500 V	600 V	700 V
2027-23	450 V	500 V	675 V	700 V
2027-25	475 V	500 V	700 V	700 V
2027-30	550 V	700 V	800 V	800 V
2027-35	600 V	700 V	875 V	800 V
2027-40	650 V	800 V	925 V	900 V
2027-42	675 V	800 V	950 V	900 V
2027-47	725 V	900 V	1000 V	1000 V
2027-60	800 V	1000 V	1100 V	1100 V

(1) Previous = typical values. New = maximum values.

If you have any questions or need additional information, please feel free to [contact Customer Service/Inside Sales](#).

2027-07-SMLF
2027-07-SM-RP3LF
2027-07-SM-RP2LF
2027-07-SM-RPLF
2027-09-SMLF
2027-09-SM-RPLF
2027-09-SM-RP2LF
2027-09-SM-RP3LF
2027-15-SMLF
2027-15-SM-RPLF
2027-15-SM-RP2LF
2027-15-SM-RP3LF
2027-20-SMLF
2027-20-SM-RPLF
2027-20-SM-RP2LF
2027-20-SM-RP3LF
2027-23-SMLF
2027-23-SM-RPLF
2027-23-SM-RP2LF
2027-23-SM-RP3LF
2027-25-SMLF
2027-25-SM-RP2LF
2027-25-SM-RPLF
2027-25-SM-RP3LF
2027-30-SMLF
2027-30-SM-RPLF
2027-30-SM-RP2LF
2027-30-SM-RP3LF
2027-35-SMLF
2027-35-SM-RPLF
2027-35-SM-RP2LF
2027-35-SM-RP3LF
2027-40-SMLF
2027-40-SM-RPLF
2027-40-SM-RP2LF
2027-40-SM-RP3LF
2027-42-SMLF
2027-42-SM-RPLF
2027-42-SM-RP2LF
2027-42-SM-RP3LF
2027-47-SMLF
2027-47-SM-RPLF
2027-47-SM-RP2LF
2027-47-SM-RP3LF

2027-60-SMLF
2027-60-SM-RP3LF
2027-60-SM-RP2LF
2027-60-SM-RPLF