

Features

- Balanced TRIGARD®
- Approximately 8 mm diameter, 11 mm long
- UL Recognized
- Custom configurations available
- High surge current rating
- Stable breakdown throughout life
- RoHS compliant*

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

2026 Series – 3-Pole Gas Discharge Tube

Characteristics

Test Methods per ITU-T K.12, IEEE C62.31 and IEC 61643-311 GDT standards.

Characteristic	Model No.						
	2026-07	2026-09	2026-15	2026-20	2026-23	2026-25	2026-26
DC Sparkover ±20 % @ 100 V/s (1)	75 V	90 V	150 V	200 V	230 V	250 V	260 V
Impulse Sparkover (2)							
100 V/µs	275 V	275 V	350 V	425 V	450 V	475 V	475 V
1000 V/µs	700 V	600 V	575 V	625 V	650 V	700 V	700 V

Characteristic	Model No.					
	2026-30	2026-35	2026-40	2026-42	2026-47	2026-60
DC Sparkover ±20 % @ 100 V/s (1)	300 V	350 V	400 V	420 V	470 V	600 V
Impulse Sparkover (2)						
100 V/µs	550 V	625 V	675 V	725 V	800 V	925 V
1000 V/µs	775 V	875 V	925 V	1000 V	1100 V	1250 V

(1) In ionized mode.
(2) Impulse Sparkover voltage is defined as typical values of distribution.

Impulse Transverse Delay	1000 V/µs	< 75 ns	
Insulation Resistance	100 V (50 V for Model 2026–07 & 2026-09)	> 10^{10} Ω	
Glow Voltage	10 mA	~ 70 V	
Arc Voltage	1A	~ 10 V	
Glow-Arc Transition Current		< 0.5 A	
Capacitance	1 MHz	< 2 pF	
DC Holdover Voltage (3)	>135 V, (52 V for Model 2026-07 & 2026-09, 80 V for Model 2026-15)	< 150 ms	
Impulse Discharge Current	20000 A, 8/20 µs (4)		10 operations
	5000 A, 10/350 µs		1 operation
	1000 A, 10/1000 µs		400 operations
Alternating Discharge Current	130 Arms, 11 cycles (4)		1 operation minimum
	20 Arms, 1 s		10 operations
Operation and Storage Temperature			-40 to +90 °C
Climatic Category (IEC 60068-1)			40/ 90/ 21
Moisture Sensitivity Level			1
ESD Classification (HBM)			N/A

An optional Switch-Grade Fail-Short device is available. The optional Fail-Short assembly will activate at a temperature of 215 °C – 217 °C to provide a high conductive path to ground in case of a thermal overload. GDTs equipped with the optional Fail-Short device should be soldered either manually at a temperature that is below the activation temperature of the Fail-Short mechanism, or using a selective soldering process that does not exceed 210 °C.

Notes:

- Model number marking on tube: 26-xxx V.
- The rated discharge current for TRIGARD® Gas Discharge Tubes is the total current equally divided between each line to ground.
- Sparkover limits after life ±25 %, IR >10^8Ω (-25 %,+30 % for Model 2026-07, 2026-09 and 2026-60).
- Line to Line voltage is approximately 1.8 to 2 times the stated Line to Ground breakdown voltage.
- At delivery AQL 0.65 Level II, DIN ISO 2859

(3) Network applied.
(4) DC Sparkover may exceed ±25 % after discharge, but will continue to protect without venting.

CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

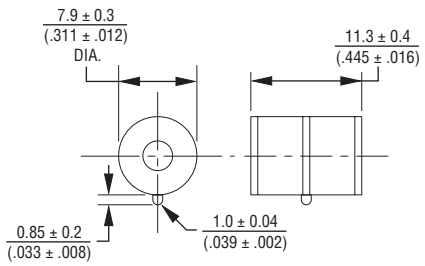
*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Applications

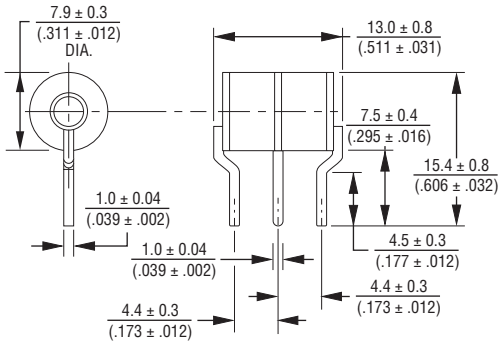
- Telecommunications
- Industrial electronics
- Commercial electronics
- Consumer electronics

Product Dimensions (additional lead form configurations available upon request)

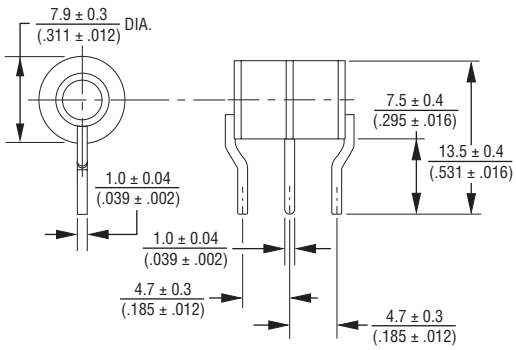
2026-XX-A1



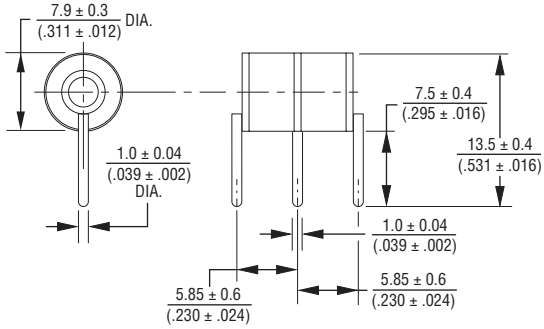
2026-XX-C2



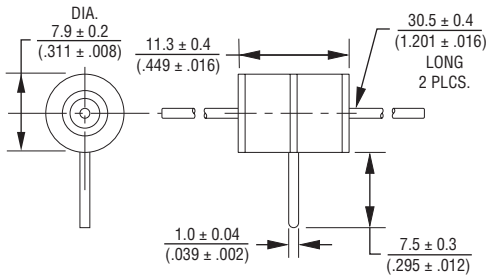
2026-XX-C3



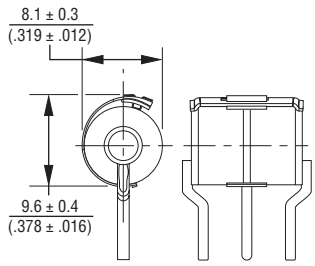
2026-XX-C4



2026-XX-C
1.0 ± 0.08 mm (.039 ± .002 in.) dia. lead wire



FAIL-SHORT CONFIGURATION
2026-XX-C2F SHOWN



DIMENSIONS: MM / (INCHES)

UNITS WITH LEADS ARE BASED ON THE 2026-XX-A1 BODY.

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

How to Order

2026 - nn - x n F LF

Model Number Designator

Voltage (Divided by 10)
- 07 = 75 V
- 09 = 90 V
- 15 = 150 V
- 20 = 200 V
- 23 = 230 V
- 25 = 250 V
- 26 = 260 V
- 30 = 300 V
- 35 = 350 V
- 40 = 400 V
- 42 = 420 V
- 47 = 470 V
- 60 = 600 V

Leads
- A = None
- C = 1 mm

Lead Shape
(See Product Dimension Drawings)

Fail-Short Option
- Blank = Standard Product
- F = With Fail-Short Mechanism

RoHS Compliant Designator
- LF = RoHS Compliant Product

Packaging Specifications

Model	Standard Packaging Quantity		
	Bulk (Bag)	Tray	Box
2026-XX-A1	250		1000
2026-XX-C	50		300
2026-XX-C2		100	1000
2026-XX-C3		100	1000
2026-XX-C4		100	1000

Agency Recognition / Industry Standards

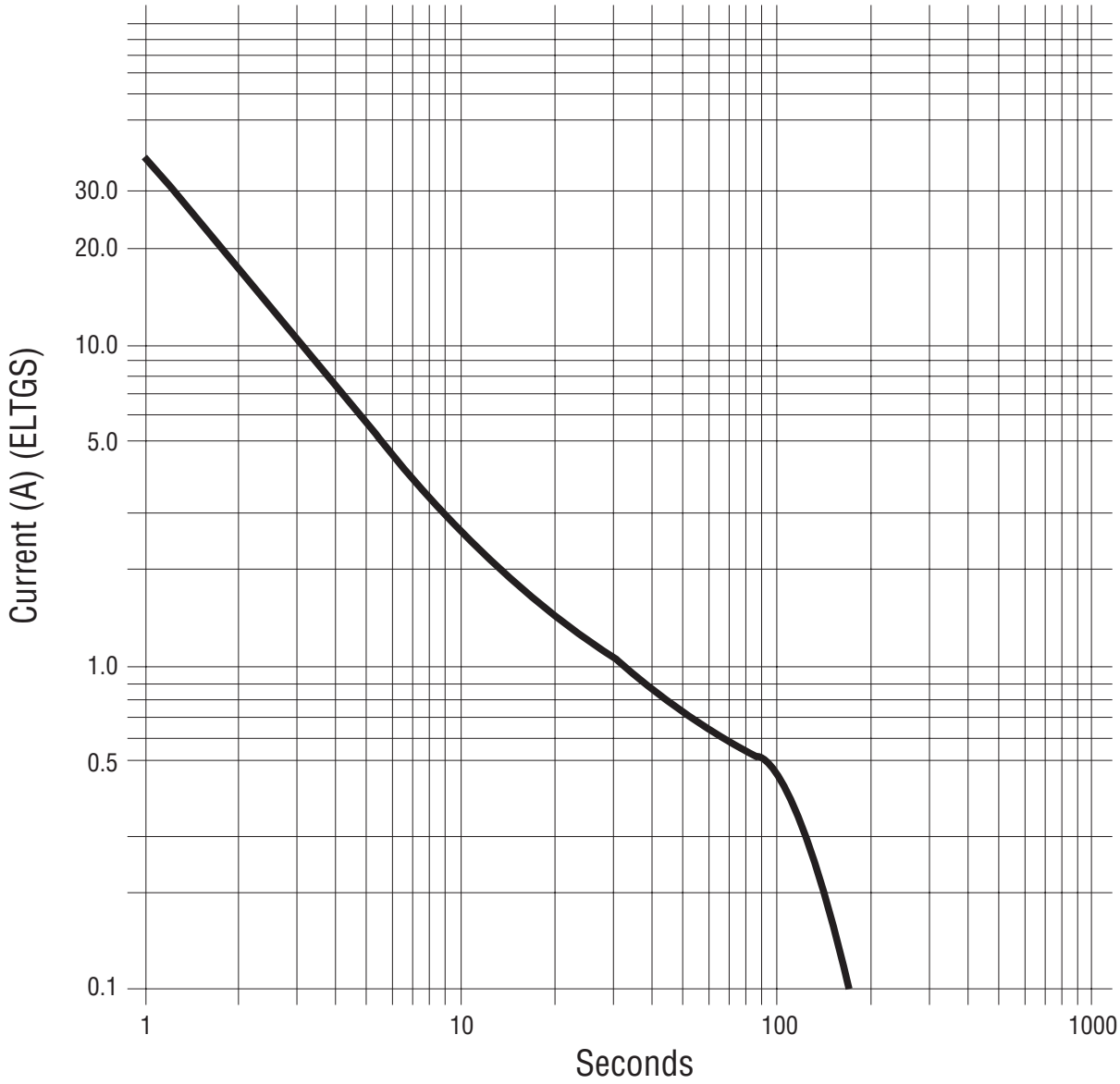
Agency	References
	UL 497B Recognized Component, Category QVGQ2, File E153537
	UL 497 Recognized Component, Category QVGV2, File E53117
Telcordia GR-974-CORE/ GR-1361-CORE	2026 Series devices, as applicable, are tested to GR requirements for primary protectors

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com
Europe: Tel: +36 88 885 877 • Email: eurocus@bourns.com
Mexico: Tel: +52 614 478 0400 • Email: mexicus@bourns.com
The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com
www.bourns.com

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Switch-Grade Fail-short Device Shorting Curve 2026-XX-XF



ELTGS = Each Line to Ground Simultaneously

NOTE: When using a GDT fail-short device, it is imperative that all components associated and connected to the GDT with failsafe be tested in their respective completely integrated environment (finished product) to assure desired operation.

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Legal Disclaimer Notice

BOURNS®

This legal disclaimer applies to purchasers and users of Bourns® products manufactured by or on behalf of Bourns, Inc. and its affiliates (collectively, "Bourns").

Unless otherwise expressly indicated in writing, Bourns® products and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest relevant information and verify that such information is current and complete before placing orders for Bourns® products.

The characteristics and parameters of a Bourns® product set forth in its data sheet are based on laboratory conditions, and statements regarding the suitability of products for certain "typical" applications are based on Bourns' knowledge of typical requirements in generic applications. Bourns assumes that "typical" applications include failsafe/backup features to address critical risks to users and are designed to allow rework of Bourns® product to avoid scrap of a device solely due to malfunctioning Bourns® product. The characteristics and parameters of a Bourns® product in a user application may vary from the data sheet characteristics and parameters due to (i) the combination of the Bourns® product with other components in the user's application, or (ii) the environment of the user application itself. The characteristics and parameters of a Bourns® product also can and do vary in different applications and actual performance may vary over time. Thus, users should always verify the actual performance of the Bourns® product in their specific devices and applications and make their own independent judgments regarding the suitability of Bourns® product and the amount of additional test margin to design into their device or application to compensate for differences between laboratory and real-world conditions.

Unless Bourns has explicitly designated an individual Bourns® product as meeting the requirements of a particular industry standard (e.g., IATF 16949) or a particular qualification (e.g., UL listed or recognized), Bourns is not responsible for any failure of an individual Bourns® product to meet the requirements of such industry standard or particular qualification even if such industry standard or qualification is a "state of art". Users of Bourns® products are responsible for ensuring compliance with safety-related requirements and standards applicable to their devices or applications.

Bourns® products are not recommended, authorized or intended for use in applications where failure or malfunction may result in personal injury, death, or severe property or environmental damage, such as without limitation nuclear, life-critical medical and certain automotive and aviation applications. Except as set forth in the bullet points below or unless expressly and specifically approved in writing on a case-by-case basis by an authorized Bourns' representative, use of any Bourns® products in such unauthorized high-risk applications is at the user's sole risk.

- Bourns considers implantable/invasive devices and devices/procedures designed as life-supporting or life-sustaining by the U.S. Food and Drug Administration or equivalent organizations outside of the United States as "life-critical" medical applications. Bourns expressly identifies those Bourns® standard products that are suitable for use in typical medical applications that are not life-critical in its publication entitled "Bourns Medical Grade Component Guide."

- Bourns expressly identifies those Bourns® standard products that are suitable for use in typical automotive applications associated with any Automotive Safety Integrity Level (ASIL) in its publication entitled "Bourns Automotive Grade Component Guide." Bourns' designation of Bourns® product as compliant with the AEC-Q standard does not by itself mean that Bourns has approved such product for use in an automotive application.

- Bourns expressly identifies Bourns® standard products that are suitable for use in the typical aviation applications/systems requiring System Design Assurance Level (RTCA DO-254 DAL) of C, D or E in its publication entitled "Bourns Civilian Aerospace/Aviation Grade Component Guide." Bourns does not test its products for compliance with United States Federal Aviation Administration standards or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aviation applications. Use of Bourns® standard components in aviation applications associated with RTCA DO-254 DAL A or B without proper approval noted above shall be at the user's sole risk.

- Bourns will review and authorize on a case-by-case basis the use of Bourns® standard products which are at least AEC-Q compliant in space-related civil applications (rockets, satellites) with a negotiated cross-waiver and indemnity agreement.

The use and level of testing applicable to Bourns® custom products shall be negotiated on a case-by-case basis by Bourns and the user for which such Bourns® custom products are specially designed. Absent a written agreement between Bourns and the user regarding the use and level of such testing, the above provisions applicable to Bourns® standard products shall also apply to such Bourns® custom products.

Use of Bourns® products or Bourns' technology in military/defense applications must be reviewed with Bourns for compliance with applicable export control laws and embargoes. Users shall not sell, transfer, export or re-export (which includes transfers within a country) any Bourns® products or technology or technical data for use in activities which involve the design, development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor shall they use Bourns® products or technology or technical data in any facility which engages in activities relating to such devices. Further, Bourns® products and Bourns' technology and technical data may not under any circumstance be exported or re-exported to countries subject to international sanctions or embargoes. Bourns® products and technology may not, without prior authorization from Bourns and/or the Government of a country where such product/technology is designed and/or manufactured, be resold, transferred, or re-exported (including within the same country) to any party not eligible to receive commodities, software, and technical data originating in such country.

To the maximum extent permitted by applicable law, Bourns disclaims (i) any and all liability for special, punitive, consequential, incidental or indirect damages or lost revenues or lost profits, and (ii) any and all implied warranties (those not based on parameters specified in Bourns' data sheets and/or specifications), including implied warranties of fitness for a particular purpose, non-infringement and merchantability.

For your convenience, copies of this Legal Disclaimer Notice with German, Spanish, Japanese, Traditional Chinese and Simplified Chinese bilingual versions are available at:

Web Page: https://www.bourns.com/legal/disclaimers-terms-and-policies
PDF: https://www.bourns.com/docs/Legal/disclaimer.pdf