



NEW PRODUCT RELEASE

GAS DISCHARGE TUBES



Bourns Releases New High Voltage Gas Discharge Tube Arrestor for Power Applications

Model GDT25H

Riverside, California - November 26, 2025 – Bourns is pleased to announce the introduction of its new [Model GDT25H](#) Next-generation 2-Electrode Gas Discharge Tube (GDT), designed for high voltage protection requirements.

The new Model GDT25H is certified under UL 1449, marking a significant step beyond the traditional UL 497B category. This certification positions the Model GDT25H as an ideal solution for demanding surge protection designs in industrial, energy, and power systems.

Leveraging Bourns' heritage of innovation and quality in overvoltage surge arrestors, the Model GDT25H delivers robust protection against fast-rising voltage transients caused by lightning or power line disturbances. With its extended voltage range in a compact form factor, this model provides notable current handling, helping reduce stress on downstream circuitry while ensuring reliable performance across a wide operating temperature range from -55 °C to +125 °C.

Bourns Part No.	Device Specifications (1)								
	DC Sparkover Voltage ±20 % (2) (3) (4)	Impulse Sparkover Voltage (2) (5)		Insulation Resistance (IR) (6)	Glow Voltage	Arc Voltage	Glow to Arc Transition Current	Capacitance	DC Holdover Voltage (8)
	100 V/s	100 V/s	1 kV/μs	(7)	10 mA	> 1 A		1 MHz	< 150 ms
GDT25H-75	750 V	1250 V	1400 V	> 2 GΩ	~ 70 V	~ 5 V	< 1 A	<0.6 pF	135 V

Bourns Part No.	Life Ratings (9)					
	Max. Surge Current	Nominal Impulse Discharge Current			Nominal AC Discharge Current	
	8/20 μs	8/20 μs	10/350 μs	10/1000 μs	11 Cycles @ 60 Hz	1 Second
GDT25H-75	10 kA 1 Operation	5 kA 10 Operations	1 kA 1 Operation	100 A 300 Operations	20 Arms 1 Operation	7 Arms 10 Operations

Notes:

- (1) At delivery AQL 0.65 Level II, DIN ISO 2859.
- (2) DC and Impulse Sparkover values are in ionized mode @ 25 °C.
- (3) Bourns recommends reflowing surface mount devices per IPC/ JEDEC J-STD-020 rev. D.
- (4) Surface mount GDTs may exhibit a temporary increase in the DC Sparkover Voltage after the solder reflow process. The DC Sparkover Voltage will recover within 24 hours. There is no quality defect nor change in protection levels during the temporary increase in DC Sparkover Voltage.
- (5) Impulse Sparkover voltage is expressed as a maximum value, with a 99 % probability of measured values within limit.
- (6) IR limits after Life Ratings > 100 MΩ.
- (7) IR Test Voltage: 100 V
- (8) Network applied (per ITU-T K.12 Edition 9.0, Section 7).
- (9) DC Sparkover Voltage limits after Life Ratings may exceed +20 % but will continue to protect without venting (per ITU-T K.12 Edition 9.0, Section 6, where applicable)

Additional Information

[DATA SHEET](#)[PRODUCT SELECTOR](#)[TECHNICAL LIBRARY](#)[INVENTORY](#)[SAMPLES](#)[CONTACT](#)

GDT2516



Please visit the Bourns website at [https://www.bourns.com/products/circuit-protection/gas-discharge-tube-\(gdt\)-surge-arrestors/2-electrode-gdts/high-voltage-series](https://www.bourns.com/products/circuit-protection/gas-discharge-tube-(gdt)-surge-arrestors/2-electrode-gdts/high-voltage-series) for details on Bourns® 2-Electrode GDTs. If you have any questions or need additional information, please contact [Bourns Customer Service/ Inside Sales](#).

Features

- Fast response time
- Wide temperature range
- High surge current rating
- Low capacitance and insertion loss
- Stable performance throughout life
- RoHS compliant*

Applications

- Industrial control panels / MCCs
- HVAC
- EV charging
- BESS / BMS interfaces
- PV inverter and combiner DC input

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

GDT25H-75-S1-BK
GDT25H-75-S1-RP