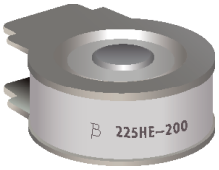
BOURNS®

NEW PRODUCT RELEASE

GAS DISCHARGE TUBES



Bourns Releases New High Voltage, High Energy Gas Discharge Tubes

GDT225HE Series

Riverside, California - February 20, 2026 – Bourns is pleased to announce the release of the GDT225HE Series, a family of UL Recognized High Voltage, High Energy Gas Discharge Tube (GDT) devices.

The GDT225HE Series offers a broad DCBV from 1000 V to 2000 V which provides superior surge protection with I_n of 40 kA and I_{max} 60 kA ratings on an 8/20 µs waveform, delivering robust performance in lightning prone and high energy applications.

These devices are tested per ITU-T K.12 methods and provide a compact, space-saving solution suitable for high density and space-restricted designs. The series is available in a variety of lead shapes to fit various configuration requirements.

Bourns Part No.	Device Specifications *(1)*									
	DC Breakdown Voltage ±20 %	Maximum Impulse Breakdown Voltage	Maximum Impulse Discharge Current (8/20 µs)		Maximum Impulse Discharge Current (10/350 µs)	TOV 1200 V 0.2 S	Maximum Follow-on Current @ 50/60 Hz	MCOV [1] @ 50/60 Hz	Minimum Insulation Resistance [2]	Breakdown Time
	100~2000 V/s	1.2/50 µs 6 kV	2 Times	15 Times	1 Time					
GDT225HE-100	1000 V	1800 V	60 kA	40 kA	12.5 kA	300 A	100 A	255 V	1 GΩ	<100 ns
GDT225HE-120	1200 V	2100 V								
GDT225HE-140	1400 V	2400 V								
GDT225HE-160	1600 V	2500 V								
GDT225HE-180	1800 V	2800 V								
GDT225HE-200	2000 V	3000 V								

Notes:
(1) By a suitable MOV in series.
(2) IR Test Voltage: 500 V.
- At delivery AQL 0.65 Level II, DIN ISO 2859.
- DC and Impulse Sparkover values are in ionized mode @ 25 °C.
- Bourns recommends reflowing surface mount devices per IPC/ JEDEC J-STD-020 rev. D.
- Impulse Sparkover voltage is expressed as a maximum value, with a 99 % probability of measured values within limit.
- IR limits after Life Ratings > 100 MΩ.
- Network applied (per ITU-T K.12 Edition 9.0, Section 7).
- 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

GDT2510

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Please visit the Bourns website at https://bourns.com for additional product details and contact Bourns Customer Service/Inside Sales if you have any questions.

Features

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

Applications

- Surge Protective Devices (SPDs)
- Power systems
- Industrial equipment
- Renewable energy (solar/wind) systems
- Energy storage systems

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