

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: GDT212E-42-A-BX

Manufacturer: Bourns Inc.

Package: Box

Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/bourns-inc/gdt212e-42-a-bx.html>

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New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.



Features

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

Applications

- Surge Protective Devices (SPDs)
- Power systems
- Industrial equipment

GDT212E Series - High Energy Gas Discharge Tube Arrestor

General Information

The Model GDT212E Series are UL recognized GDT devices rated at 40 kA maximum on an 8/20 μ s waveform, providing a broad DC breakdown voltage solution for high-density surge capability requirements. This device is available in various lead shapes to fit a variety of configuration requirements.

Product Characteristics

Storage Temperature Range	-55 °C to +105 °C
Operating Temperature Range	-55 °C to +105 °C
Climate Category (IEC 60068-1)	55 / 105 / 21
Moisture Sensitivity Level (MSL)	1
ESD Classification - HBM	N/A

How to Order

Description	GDT 2 12 E - xx - A - BX				
GDT = Gas Discharge Tube - Next-Generation Series					
Electrodes					
2 = 2-Electrode					
Size					
12 = 12 mm Diameter					
Sub-series Designator					
E = High Energy GDT					
Voltage					
23 = 230 V 47 = 470 V					
25 = 250 V 50 = 500 V					
30 = 300 V 60 = 600 V					
35 = 350 V 70 = 700 V					
42 = 420 V 80 = 800 V					
Terminal Designator**					
A = Leadless (Standard)					
T1 = M3 Stud Terminals					
T2 = Parallel Terminals					
Packaging Options					
BX = Box (Standard)					

**Special terminals upon request

BOURNS®

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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.

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Agency Recognition

Agency	Category	Agency File No.
UL	1449-4	E313168

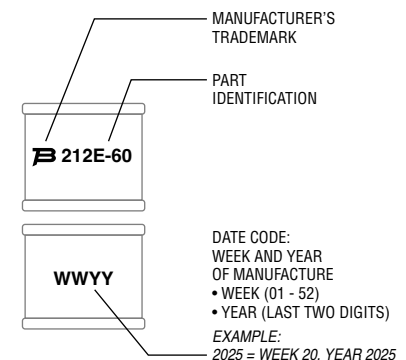
Circuit Diagram



Note: Gas discharge tubes are bidirectional and non-polarized.

Typical Part Marking

Represents total content. Layout may vary.



Packaging Specifications

Model	Quantity per Box
GDT212E-xx-A	1200
GDT212E-xx-T1	1050
GDT212E-xx-T2	1200

BOURNS®

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

Notes:

- | | |
|--|--|
| <p>(1) IR Test Voltage: 100 V for GDT212E-23 through GDT212E-35;
250 V for GDT212E-42 through GDT212E-80.</p> <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> IR limits after Life Ratings > 100 MΩ. Network applied (per <i>ITU-T K.12 Edition 9.0, Section 7</i>). DC Sparkover Voltage limits after Life Ratings may exceed +20 % but will continue to protect without venting (per <i>ITU-T K.12 Edition 9.0, Section 6</i>, where applicable). |
|--|--|

GDT212E-xx-A

GDT212E-xx-T1

GDT212E-xx-T2



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