

Features

- Bourns® FLAT® GDT technology
- Improved impulse performance
- Flexible mounting options
- Stable breakdown throughout life
- Volume- and space-saving design
- UL Recognized
- RoHS compliant* and halogen free**

Applications

- Telecommunications
- Industrial Communications
- Surge Protective Devices
- High density PCB assemblies

2011 Series - Fast Acting GDT Surge Arrestor with FLAT® Technology

Description

Bourns sets a new industry standard by offering this fast acting 2-electrode Gas Discharge Tube (GDT) in an innovative flat package design. The Model 2011 Series with FLAT® Technology provides a volume and space-saving solution for high density and space-restricted PCB applications.

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Characteristics

Test Methods per ITU-T (CCITT) K.12 and IEC 61643-311

Characteristic	Model No.
	2011-15
Minimum / Maximum DC Sparkover (100 V/s) Throughout Service Life	60 V / 350 V
Maximum Impulse Sparkover (5 kV 1.2/50 µs) Throughout Service Life	650 V

Insulation Resistance (IR) ..... 50 V ..... >10 megohms
Capacitance ..... 1 MHz ..... <2.9 pF
Service Life ..... 8/20 µs, 1000 A ..... 2 operations
2/10 µs, 5 kV, 500 A ..... 20 operations
600 Vrms, 1 A, 0.2 s ..... 5 operations
Operating Temperature ..... -40 to +90 °C
Storage Temperature ..... -40 to +90 °C
Climatic Category (IEC 60068-1) 40/90/21
Moisture Sensitivity Level 1
ESD Classification (HBM) ..... N/A

Notes:
UL Recognized component, UL File E153537
Surge polarity should be reversed between consecutive surges (+-+-)
At delivery AQL 0.65 Level II, DIN ISO2859
Bourns recommends reflowing surface mount devices per IPC/JEDEC J-STD-020 rev D

How to Order

2011 - 15 - SMH - RP LF

Series Designator
2011 = Fast Acting 2-Electrode GDT with FLAT® Technology

Voltage (Divided by 10)
15 = 150 V

Configuration
SMH = Horizontal Mount SMD

Packaging
RP = Reelpack (Standard)
Blank = Cut Tape

RoHS Compliancy
LF = RoHS Compliant Product

BOURNS®

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WARNING
Cancer and Reproductive Harm
www.P65Warnings.ca.gov

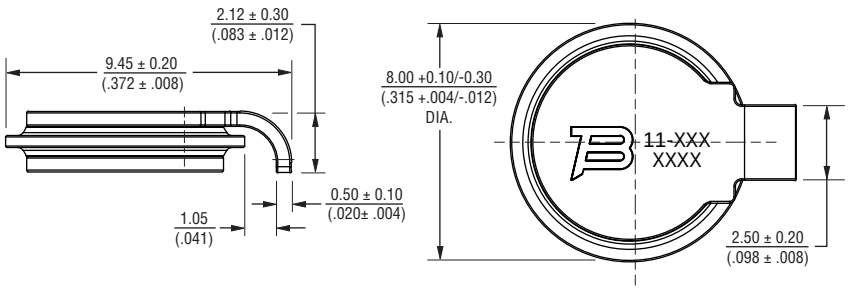
* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Product Dimensions

2011-15-SMH-RPLF



DIMENSIONS: MM / (INCHES)

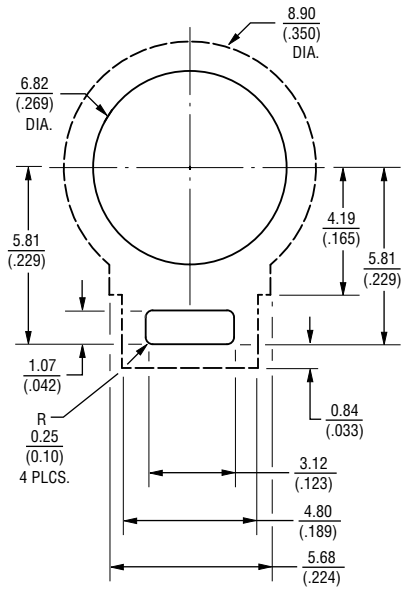
TOLERANCES: .X = ± 1.27 / (.05)

.XX = ± 0.254 / (.01)

.XXX = ± 0.127 / (.005)

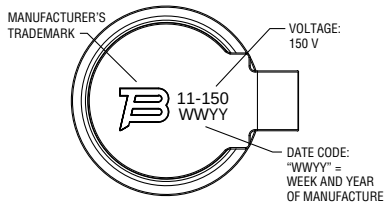
Pad Layout

2011-15-SMH-RPLF



DIMENSIONS: MM / (INCHES)

Typical Part Marking



Information may be placed vertically or horizontally on the various models.

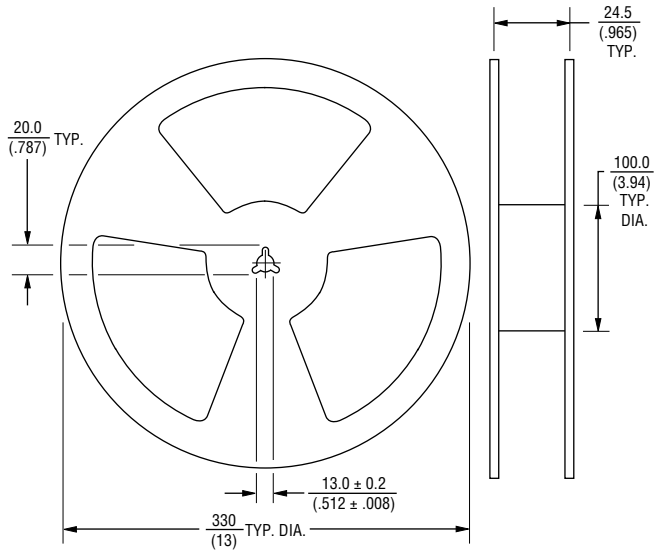
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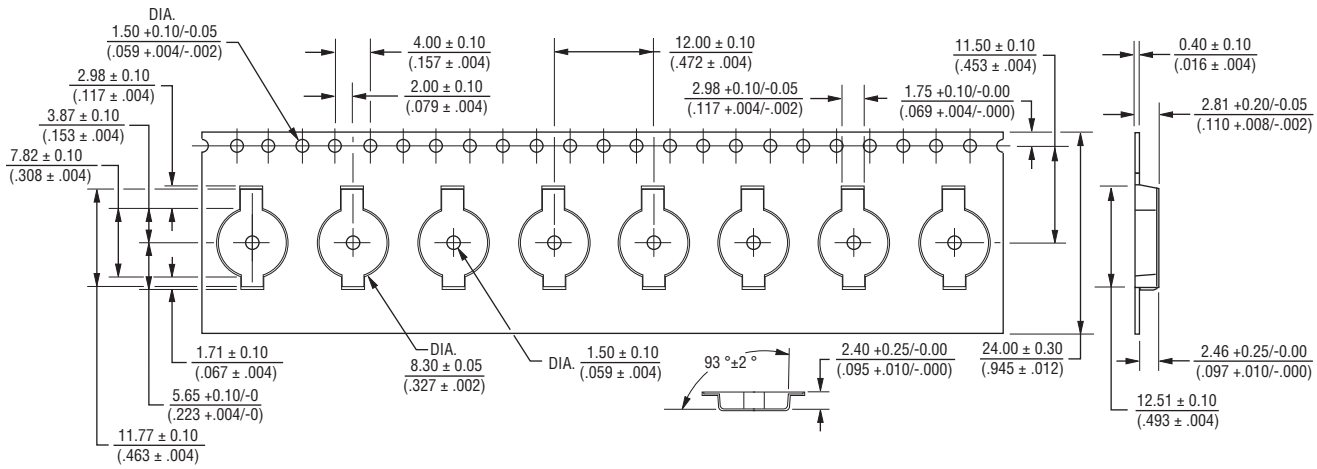
Packaging Specification

TAPE & REEL

The standard tape and reel packaging contains 2,000 pieces per 13-inch reel.

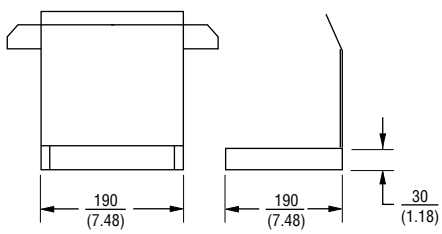


DIMENSIONS: MM / (INCHES)



CUT TAPE

Cut tape contains 500 pieces within a carton box.



DIMENSIONS: MM / (INCHES)

REV. B – 12/18

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