



Features

- Bourns® FLAT® GDT technology
- Flexible mounting options
- Volume- and space-saving design
- Improved impulse performance
- 10 kA 8/20 μ s rated
-  UL Recognized
- RoHS compliant*

Applications

- Telecom CPE
- Industrial Communications
- Surge Protective Devices
- High density PCB assemblies

2017 Series Gas Discharge Tube Surge Arrestor with FLAT® Technology

Description

Bourns sets a new industry standard by offering this 2-electrode Gas Discharge Tube (GDT) in an innovative flat package design. The Model 2017 Series with FLAT® Technology provides a volume and space-saving solution for high density and space-restricted PCB applications. The series is offered in a leadless version for cartridge or clamp fit applications. Surface mount versions are available in vertical and horizontal mounting configurations.

Characteristics

Test Methods per ITU-T (CCITT) K.12 Class 3 and IEC 61643-311

Characteristic	Model No.				
	2017-09	2017-15	2017-23	2017-35	2017-42
DC Sparkover $\pm 20\%$ @ 100 V/s (1)	90 V	150 V	230 V	350 V	420 V
DC Sparkover End-of-Life Values (2)					
Maximum (99 % of values)	<120 V	<195 V	<300 V	<455 V	<550 V
Minimum (99 % of values)	>65 V	>110 V	>170 V	>260 V	>360 V
Impulse Sparkover Voltage (3)					
100 V/ μ s Typical / For 99 % of Values	350 / <450 V	400 / <550 V	450 / <600 V	600 / <700 V	600 / <750 V
1 kV/ μ s Typical / For 99 % of Values	600 / <800 V	700 / <950 V	700 / <950 V	800 / <1000 V	900 / <1050 V

Insulation Resistance (IR)	100 V (50 V for Model 2017-09)	> 1 G Ω
Glow Voltage	10 mA	~70 V
Arc Voltage	>1 A	~10 V
Capacitance	1 MHz	<2.3 pF
Impulse Discharge Current	12000 A, 8/20 μ s	1 operation
	10000 A, 8/20 μ s	>10 operations
	2500 A, 10/350 μ s	1 operation
	100 A, 10/1000 μ s	>300 operations
	10 A, 10/1000 μ s	>1500 operations
Alternating Discharge Current	10 Arms, 1 s	>10 operations
Operating Temperature		-55 to +85 °C
Storage Temperature		-55 to +105 °C
Climatic Category (IEC 60068-1)		40/90/21
Pushover Strength (4)		5 kg

Notes:

UL Recognized component, UL File E153537

(1) In ionized mode. (3) At delivery AQL 0.65 Level II, DIN ISO 2859.

(2) IR after life >10⁶ Ω . (4) Pushover Strength test performed on a board-mounted Model 2017-xx-SMC (Vertical Mount).

How to Order

Series Designator 2017 - xx - xxx - RP LF

2017 = 2-electrode GDT with FLAT® Technology, 10 kA 8/20 μ s rated

Voltage (Divided by 10) _____

09 = 90 V 23 = 230 V 42 = 420 V
15 = 150 V 35 = 350 V

Configuration _____

A = No Leads, (Clamp-Cartridge)
SMH = Horizontal Mount SMD
SMC = Vertical Mount SMD

Packaging _____

RP = Reelpack (Standard)

RoHS Compliance _____

LF = RoHS Compliant Product

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

EMEA: Tel: +36 88 520 390 • Fax: +36 88 520 211

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

www.bourns.com

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

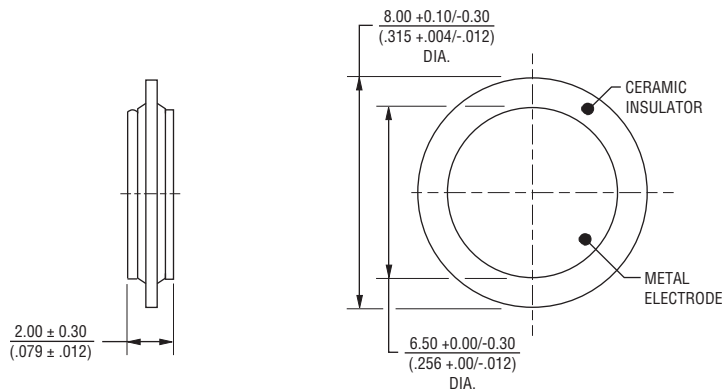
"FLAT" is a registered trademark of Bourns, Inc. in the U.S. and other countries. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

2017 Series Gas Discharge Tube Surge Arrestor with FLAT® Technology

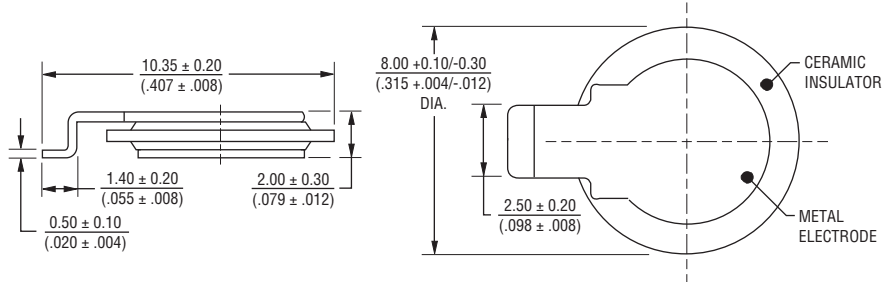
BOURNS®

Product Dimensions

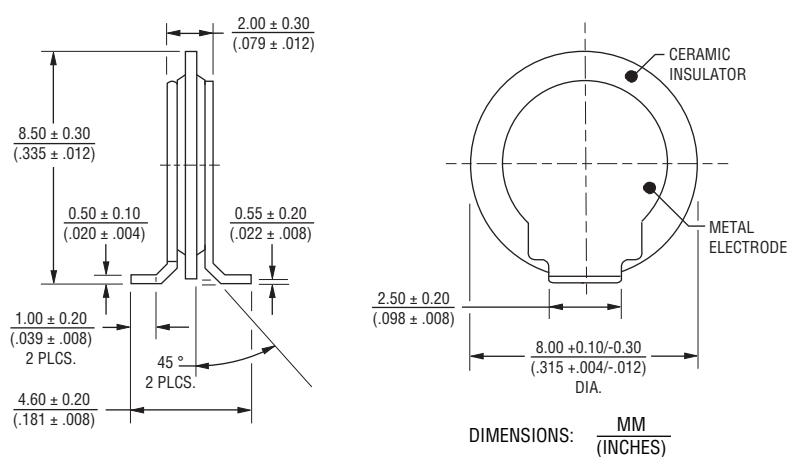
2017-xx-A-RPLF



2017-xx--SMH-RPLF



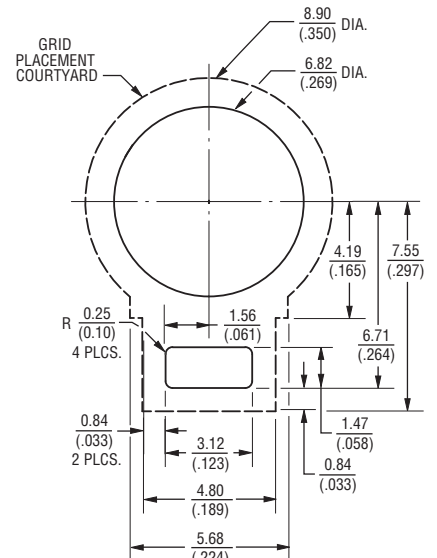
2017-xx-SMC-RPLF



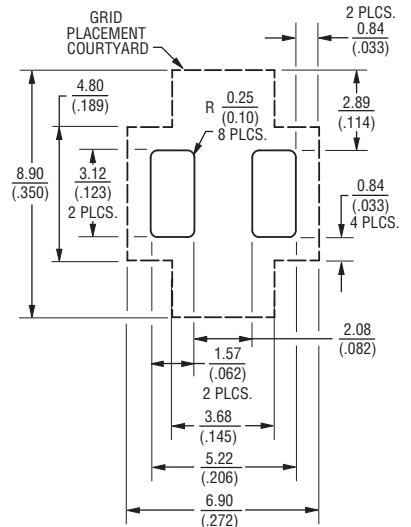
DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

Pad Layouts

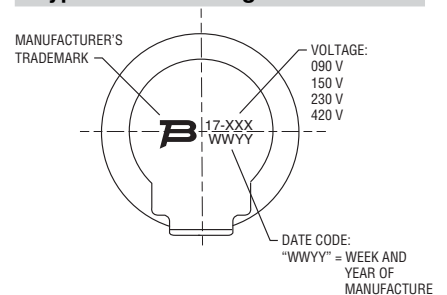
2017-xx--SMH-RPLF



2017-xx-SMC-RPLF



Typical Part Marking



Specifications are subject to change without notice.

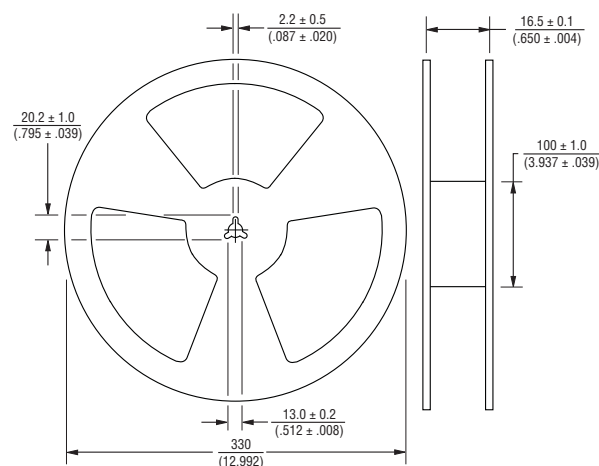
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

BOURNS®

Model 2017-xx-SMH-RPLF
and 2017-xx-A-RPLF: The standard tape and reel packaging
contains 2,000 pieces per 13-inch reel.

DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$



Technical drawing of the 17-XX-SMC-RT-EL component, showing dimensions in inches and millimeters.

Top View Dimensions:

- Overall width: 12.00 ± 0.10 ($.472 \pm .004$)
- Overall height: 8.77 ± 0.15 ($.345 \pm .006$)
- Distance from top edge to first hole center: 4.38 ± 0.15 ($.173 \pm .006$)
- Distance between hole centers: $1.50 \pm 0.10 / -0.05$ ($.059 \pm .004 / -.002$)
- Distance from last hole center to right edge: $1.75 \pm 0.10 / -0.00$ ($.069 \pm .004 / -.000$)
- Distance from right edge to mounting flange: 0.65 ± 0.10 ($.026 \pm .004$)
- Distance from left edge to first hole center: 4.00 ± 0.10 ($.157 \pm .004$)
- Distance between hole centers (top): 2.00 ± 0.10 ($.079 \pm .004$)
- Distance between hole centers (bottom): 5.33 ± 0.10 ($.210 \pm .004$)
- Distance between hole centers (bottom): 2.79 ± 0.20 ($.110 \pm .008$)
- Distance between hole centers (bottom): 1.79 ± 0.20 ($.070 \pm .008$)
- Distance from bottom edge to hole center: 10.99 ± 0.20 ($.433 \pm .008$)
- Distance from bottom edge to mounting flange: 16.00 ± 0.30 ($.630 \pm .012$)
- Distance from bottom edge to mounting flange: $8.90 \pm 0.20 / -0.05$ ($.350 \pm .008 / -.002$)
- Distance from bottom edge to mounting flange: 3.30 ± 0.20 ($.130 \pm .008$)

Side View Dimensions:

- Overall height: $8.90 \pm 0.20 / -0.05$ ($.350 \pm .008 / -.002$)
- Distance from bottom edge to mounting flange: 16.00 ± 0.30 ($.630 \pm .012$)
- Distance from bottom edge to mounting flange: $8.90 \pm 0.20 / -0.05$ ($.350 \pm .008 / -.002$)

Detail View Dimensions:

- Overall width: 1.50 ± 0.10 ($.059 \pm .004$)
- Overall height: $8.90 \pm 0.20 / -0.05$ ($.350 \pm .008 / -.002$)
- Distance from bottom edge to mounting flange: 16.00 ± 0.30 ($.630 \pm .012$)
- Distance from bottom edge to mounting flange: $8.90 \pm 0.20 / -0.05$ ($.350 \pm .008 / -.002$)
- Distance from bottom edge to mounting flange: 3.30 ± 0.20 ($.130 \pm .008$)
- Angle: 85°
- Angle: 60°

Technical drawing of a 10-hole 1.5 inch diameter plate. The drawing shows a top view and a side view. The top view includes dimensions for hole diameter, hole spacing, and overall plate dimensions. The side view shows the plate thickness and a chamfered edge.

Top View Dimensions:

- Hole Diameter: DIA. 1.50 $\pm$ 0.10 / (.059 $\pm$.004)
- Distance from edge to first hole: 2.98 $\pm$ 0.10 / (.117 $\pm$.004)
- Distance between holes: 4.00 $\pm$ 0.10 / (.157 $\pm$.004)
- Distance from last hole to edge: 8.50 $\pm$ 0.10 / (.335 $\pm$.004)
- Distance from edge to first hole (alternative): 8.05 $\pm$ 0.10 / (.317 $\pm$.004)
- Distance between holes (alternative): 2.85 $\pm$ 0.10 / -.005 / (.112 $\pm$.004)
- Distance from last hole to edge (alternative): 1.75 $\pm$ 0.10 / -.000 / (.069 $\pm$.004)
- Overall width: 11.13 $\pm$ 0.10 / (.438 $\pm$.004)
- Distance from edge to first hole (alternative): 10.38 $\pm$ 0.10 / (.409 $\pm$.004)
- Overall width (alternative): 11.03 $\pm$ 0.10 / (.434 $\pm$.004)
- Distance between holes (alternative): 12.00 $\pm$ 0.10 / (.472 $\pm$.004)
- Distance from last hole to edge (alternative): 2.40 $\pm$ 0.25 / -.000 / (.095 $\pm$.010)
- Overall width (alternative): 16.00 $\pm$ 0.30 / (.630 $\pm$.012)

Side View Dimensions:

- Plate thickness: 0.40 $\pm$ 0.10 / (.016 $\pm$.004)
- Distance from edge to first hole: 2.55 $\pm$ 0.20 / -.005 / (.100 $\pm$.008)
- Distance from last hole to edge: 2.40 $\pm$ 0.25 / -.000 / (.095 $\pm$.010)

Other Dimensions:

- Distance from edge to first hole: 10.38 $\pm$ 0.10 / (.409 $\pm$.004)
- Distance between holes: 4.00 $\pm$ 0.10 / (.157 $\pm$.004)
- Distance from last hole to edge: 8.50 $\pm$ 0.10 / (.335 $\pm$.004)
- Overall width: 11.13 $\pm$ 0.10 / (.438 $\pm$.004)
- Distance from edge to first hole: 8.05 $\pm$ 0.10 / (.317 $\pm$.004)
- Distance between holes: 2.85 $\pm$ 0.10 / -.005 / (.112 $\pm$.004)
- Distance from last hole to edge: 1.75 $\pm$ 0.10 / -.000 / (.069 $\pm$.004)
- Overall width: 11.03 $\pm$ 0.10 / (.434 $\pm$.004)
- Distance between holes: 12.00 $\pm$ 0.10 / (.472 $\pm$.004)
- Distance from last hole to edge: 2.40 $\pm$ 0.25 / -.000 / (.095 $\pm$.010)
- Overall width: 16.00 $\pm$ 0.30 / (.630 $\pm$.012)

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.



**Стандарт
Электрон
Связь**

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

Наши контакты:

Телефон: +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург,
Промышленная ул, дом № 19, литера Н,
помещение 100-Н Офис 331