

BOURNS®

Features

- Superior protection at a low price
- Patented Switch-Grade Fail-Short Device
- Quick response and high energy handling
- Low capacitance (<2.5 pF) - ideal for high-speed networks in high exposure environments
- c UL us LISTED per UL497 (File E53117)
- Meets test requirements of Telcordia GR 974, GR1361, SBC SR 5165 and RUS PE-80
- Solid brass, gold plated pins
- Test point access option
- Sealed option for harsh environments

2420 Series 5-Pin Gas Discharge Tube (GDT) Protector

The 2420 overvoltage protection modules utilize Bourns' propietary high-efficiency gas discharge tube with our patented Switch-Grade Fail-Short mechanism to provide robust and reliable surge and thermal overload protection at a very competitive price. The 2420 Series is based on Bourns' three-terminal common chamber GDT. This design provides greatly improved and balanced turn-on characteristics for overvoltage protection.The GDT is UL approved for use without a back-up device. Air back-up devices can become contaminated; the circuitry of the 2420 eliminates this possibility. Our unique Switch-Grade Fail-Short device provides more reliable thermal overload protection compared to commonly used solder pellet or insulation burn-through designs.

Bourns® 2420 Series 5-Pin protectors can be used universally for broadband voice and data circuits including ADSL, ADSL2+, VDSL ISDN and high-speed Ethernet. The 2420 Series is an economical, reliable and low capacitance choice for overvoltage protection of copper pair circuits.

Characteristics

Test Methods per UL 497, CSA C22.2, Telcordia GR 974, 1361 and SBC SR 5165.

DC Breakdown	300-400 V
AC Breakdown @ 60 Hz	300-400 V
Impulse Breakdown	
100 V/μs	625 V
1000 V/μs	875 V
Insulation Resistance @ 100 Vdc	>1 GΩ
Insertion Loss @ 100 MHz	ExceedsCategory 5
Return Loss @ 100 MHz	Exceeds Category 5
Capacitance Tip to Ring @ 1 MHz	<1.25 pF typical
Capacitance Tip or Ring to Ground @ 1 MHz	<2.50 pF typical
Impulse Reset[1]	
52 V, 260 mA	<10 ms
135 V, 200 mA	<10 ms
150 V, 200 mA	<150 ms
Impulse Life Characteristics (Tip and Ring to Ground Simultaneously)	
10 A, 10/1000 μs	>3000 operations
100 A, 10/1000 μs	>300 operations
300 A, 10/1000 μs	>100 operations
500 A, 10/1000 μs	>400 operations[2]
2,000 A, 10/250 μs	>25 operations
5,000 A, 20/100 μs	>2 operations
20,000 A, 8/20 μs	>1 operation
AC Life Characteristics (Tip and Ring to Ground Simultaneously)	
0.5 A rms continuous	>30 seconds
1 A rms, 1 second, 600 ft. cable	>60 operations
1 A rms, 1 second, 1 mile cable	>60 operations
10 A rms, 1 second	>5 operations
65 A rms, 11 cycles	>1 operation[2]
120 A rms, 0.1 second	1 operation
High Current Capability and Thermal Operation (Tip and Ring to Ground Simultaneously)	>30 A rms, 15 min.
Storage and Operating Temperature	-55 to +85 °C

Telcordia analyzed for controlled (non-sealed) and uncontrolled, high-exposure (sealed) environments per GR 974 and SBC SR 5165.
Telcordia Technical Analysis Report DA-1597.
Notes: [1] Network applied [2] Per RUS PE-80

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.

2420 Series 5-Pin Gas Discharge Tube (GDT) Protector

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How To Order

2420 - X XX - X - XX

Model Number Designator

Module Length
3 = Standard: 52.37 mm (2.06 in.) 7 = Special Short: 41.19 mm (1.62 in.)

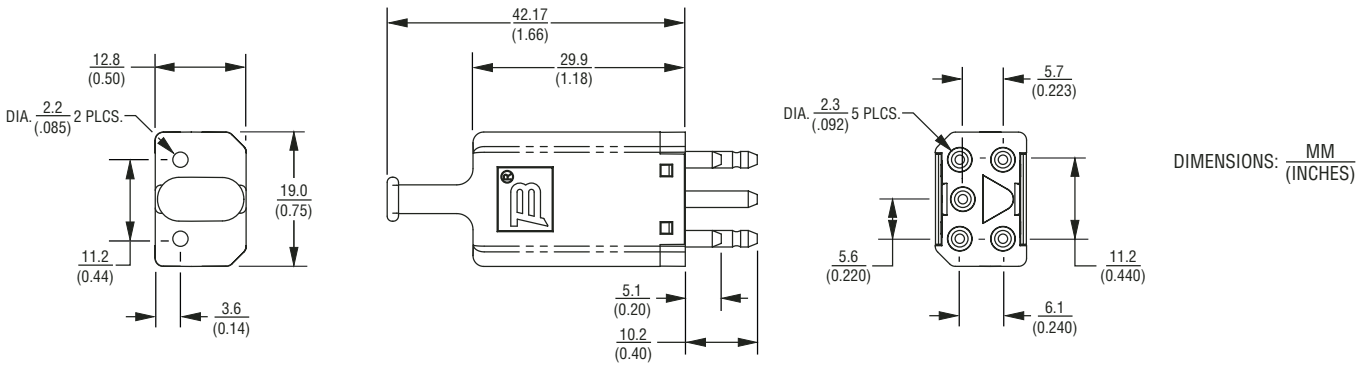
Housing Color/Circuit Type
1 = Black/Standard 9 = Orange/Standard Service (non-Bridgelifter)
3 = Red/Special 10 = Yellow/Standard

Pin Plating
G = Gold Plated N = Tin Plated

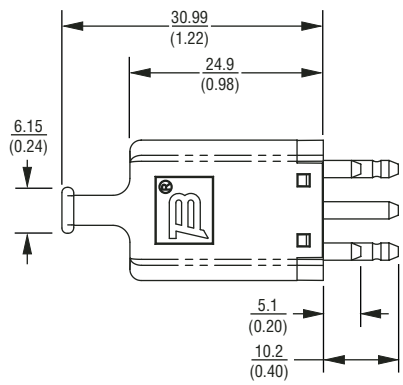
Special Options
S = Sealed Case
T = Test Points
ST = Sealed Case and Test Points

Product Dimensions

2420-3 MODULE



2420-7 MODULE



BOURNS®

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