

Features

- Superior protection at a low price
- Balanced protection
- Switch-Grade Fail-Short device
- Quick response and high energy handling
- Meets test requirements of Telcordia GR 97 4, GR1361, SBC SR 5165 and RUS PE-80
- Test point access option
- Solid brass, gold-plated pins
- UL listed per UL 497 (File: 53117)
- Telcordia Analysis report DA-1547
- Sealed option for harsh environments
- Low capacitance (<2.5 pF) - ideal for high-speed networks in high exposure environments



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

The CNI C-2420 overvoltage protection modules utilize a high-efficiency gas discharge tube with a Switch-Grade Fail-Short mechanism to provide robust and reliable surge and thermal overload protection is competitively priced. The C-2420 Series is based on a three-terminal common chamber GDT. This design provides greatly improved and balanced turn-on characteristics for overvoltage protection. The GDT is UL listed for use without a back-up device. Air back-up devices can become contaminated; the circuitry of the C-2420 eliminates the air back-up gap and thus the possibility of its contamination. Our Switch-Grade Fail-Short device provides more reliable thermal overload protection compared to commonly used solder pellet or insulation burn-through designs.

The C-2420 Series 5-pin protectors can be used universally for broadband voice and data circuits including ADSL, ADSL2+, VDSL, VDSL2 and high-speed Ethernet. The C-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	280-420 V
AC Breakdown @ 60 Hz	280-420 V
Impulse Breakdown	
100 V/ μ s	625 V
1000 V/ μ s	875 V
Insulation Resistance @ 100 Vdc	>1 G Ω
Insertion Loss @ 100 MHz	Exceeds Category 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 μ s	>3000 operations
100 A, 10/1000 μ s	>300 operations
300 A, 10/1000 μ s	>100 operations
500 A, 10/1000 μ s	>400 operations ²
2,000 A, 10/250 μ s	>25 operations
5,000 A, 20/100 μ s	>2 operations
20,000 A, 8/20 μ s	>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)	>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-1547.

Notes:

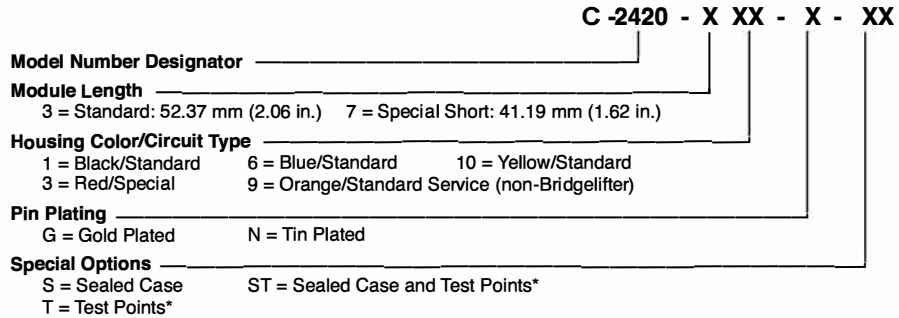
¹ Network applied

² Per RUS PE-80

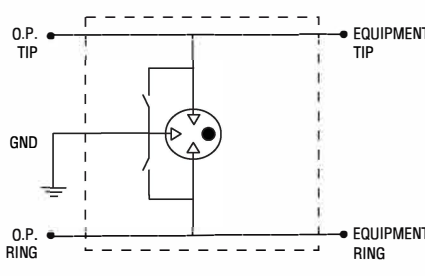
Line to Line voltage is approximately 1.8 to 2 times the stated Line to Ground breakdown voltage.

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How To Order



Schematic

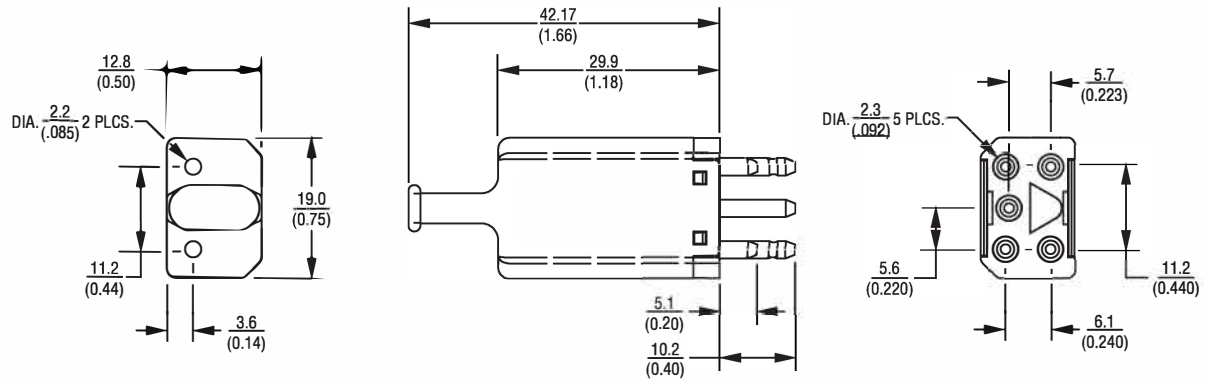


*T and ST options are not available on C-2420-7x short module.

Examples: 3B1E = C-2420-31-G (black, no test points) 3C1E = C-2420-31-G-T (black, with test points)
 3B3E = C-2420-33-G (red, no test points) 3C3E = C-2420-33-G-T (red, with test points)

Product Dimensions

C-2420-3 MODULE



C-2420-7 MODULE

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

