

Features

- Rugged 3-electrode BUG-less GDT
- Balanced TRIGARD®
- Self-resetting low resistance sneak current protection with Bourns® PPTC resistors
- Patented Switch-Grade Fail-Short device
- Quick response and high energy handling
- UL Listed per UL497
- Sealed option for harsh environments



This series is obsolete and not recommended for new designs.

2440 Series 5-Pin Surge Protector

Bourns® 5-Pin Model 2440 series is a new generation of Bourns® telecommunications protectors for superior performance and long life. The 2440 Series protector provides highly reliable overvoltage and self-resetting sneak current protection for copper pair voice-band and high speed data circuits. Bourns' high-efficiency balanced Gas Discharge Tube (GDT) is UL approved for use without a Back-Up Gap (BUG). Its Switch-Grade Fail-Short mechanism ensures superior thermal protection with fast acting, highly reliable response to thermal overload conditions. This combined technology provides lower capacitance, higher reliability and long life. Bourns® PPTC Resistors are used for sneak current protection, providing reliable and self-resetting performance with less than four ohms of resistance.

Bourns® 2440 protectors can be used universally for broadband voice and data circuits including ADSL, ADSL2+, VDSL, VDSL2 and high-speed ethernet. The 2440 Series is an innovative, reliable and effective choice for 5-pin protection of copper pair circuits.

Characteristics

Tested 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/μs.....	625 V
1000 V/μs.....	875 V
Insulation Resistance @ 100 Vdc	> 1 GΩ
Insertion Loss @ 100 MHz	Exceeds CAT5 1
Return Loss @ 100 MHz	Exceeds CAT5 1
Capacitance Tip to Ring @ 1 MHz	< 1.25 pF typical
Capacitance Tip or Ring to Ground @ 1 MHz	< 2.50 pF typical
Impulse Reset ²	
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 ³
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 ³
120 A rms, 0.1 second	1 operation
High Current Capability and Thermal Operation (T/R to Ground)	> 30 Arms, simultaneously
Storage and Operating Temperature	-55 to +85 °C
Sneak Current Characteristics	
Resistance (No Heat Coil Inductance).....	< 4 ohms
Transition Current @ -40 °C (800 mA), +20 °C (540 mA), +65 °C (300 mA)	< 210 seconds
Rated Current @ -40 °C (100 mA), +20 °C (100 mA), +65 °C (100 mA)	> 3 hours
Impulse Life 10 x 1000 μs @ -40 °C, +20 °C, +65 °C	25 A ELTGS

Telcordia analyzed for controlled (non-sealed) and uncontrolled high exposure (sealed) environments per GR 974 and SBC SR 5165. Please refer to Telcordia Analysis Report DA-1547 Volumes 1 and 2.

Notes:

¹ Tested according to Category 5 requirements.

² Network applied.

³ Per Rus PE 80.

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



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

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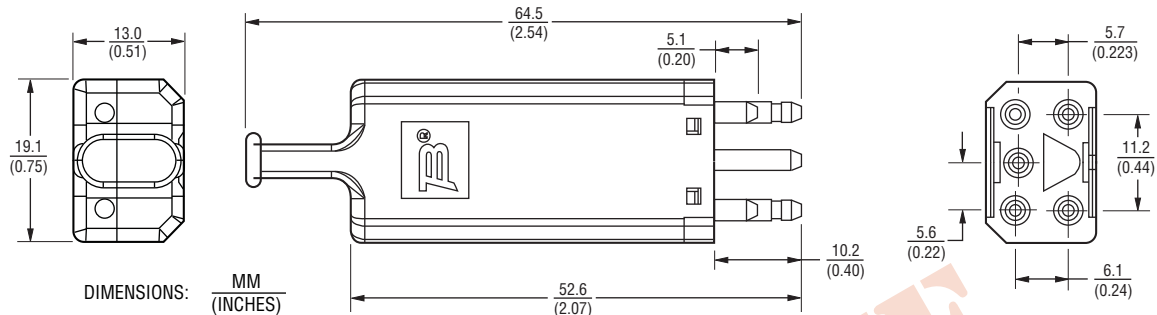
Features (Continued)

- Meets test requirements of GR 974, GR 1361, SBC SR 5165 and RUS PE-80
- Telcordia Analysis report DA-1547
- Test point access option
- Ideal for high-speed networks in high-exposure environments
- Solid brass, gold-plated pins

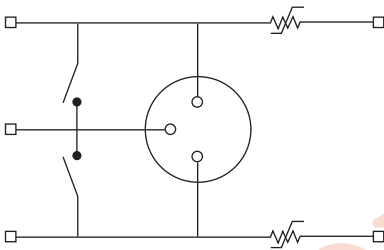
2440 Series 5-Pin Surge Protector

BOURNS®

Product Dimensions



Schematic



How To Order

2440 - 4 x - x - xx

Model Number Designator _____

Overcurrent Protection _____

Housing Color _____

- 1 = Black
- 3 = Red
- 6 = Blue
- 7 = Violet
- 9 = Orange
- 10 = Yellow

Pin Plating _____

- G = Gold Plated
- N = Tin Plated (Ground pin is tin plated on all models)

Housing Options _____

- S = Sealed
- T = Test Points
- ST = Sealed and Test Points

Examples:

- 2440-41-G-T = Black housing, 4 ohm self-resetting, gold-plated pins, test points
- 2440-43-N = Red housing, 4 ohm self-resetting, tin-plated pins, no test points

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

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