

Features

- Patented Multi-stage protection (MSP®)
- Balanced TRIGARD®
- Patented Switch-Grade Fail-Short Device
- Quick response and high energy handling
- Ideal for high-speed networks in high exposure environments
- c(1) us listed per UL 497 (File: 53117)
- 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

2410 Series - 5-Pin Multi-Stage Protector (MSP®)

Bourns® 5-Pin Multi-Stage Protector (MSP®) is the latest generation telecommunications protector for high performance and long life in overvoltage protection of copper pair voice-band and high-speed data circuits. Bourns MSP® combines the advantages of gas tube and solid state protection while integrating three advanced technologies: a proprietary high-efficiency gas discharge tube, precision matched metal oxide varistors and a patented Switch-Grade Fail-Short mechanism. The 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 longer life than competitive hybrid technologies.

Bourns® 2410 can be used universally for POTS and high speed data, e.g. ISDN, ADSL, ADSL2+, VDSL, VDSL2, other xDSL protocols and high speed Ethernet. Bourns® MSP® technology provides unparalleled overvoltage protection with low loss on paired copper communications circuits. The 2410 series is the most economical, reliable and effective 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
AC Breakdown @ 60 Hz
Impulse Breakdown
100 V/µs
1000 V/µs
Insulation Resistance @ 100 Vdc
Insertion Loss @ 100 MHz<0.4 dB1
Return Loss @ 100 MHz>14 dB1
Capacitance Tip to Ring @ 1 MHz 10 pF typical
Capacitance Tip or Ring to Ground @ 1 MHz
Impulse Reset 2
. 52 V, 260 mA
135 V, 200 mA<10 ms
150 V, 200 mA<150 ms
Impulse Life Characteristics (Tip and Ring to Ground Simultaneously)
10 to 100 A, 10/1000 µs>3000 operations
300 A, 10/1000 µs>1000 operations
500 A, 10/1000 µs>1000 operations ³
2,000 A, 10/250 µs>100 operations
5,000 A, 20/100 µs>10 operations
20,000 A, 8/20 µs
AC Life Characteristics (Tip and Ring to Ground Simultaneously)
0.5 A rms continuous
1 A rms, 1 second, 600 ft. cable
1 A rms, 1 second, 1 mile cable
10 A rms, 1 second
65 A rms, 11 cycles
120 A rms, 0.1 second
High Current Capability and Thermal Operation (Tip and Ring to Ground,
Vented or Non-Vented Gas Tube)>30 A rms, simultaneously
Storage and Operating Temperature55 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:

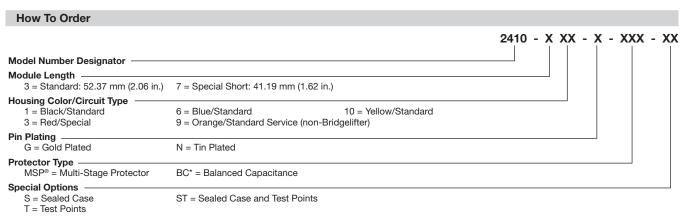
- ¹ Tested according to Category 5 requirements
- ² Network applied
- ³ Per RUS PE-80

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

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

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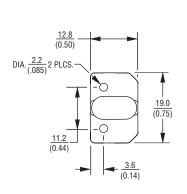
BOURNS

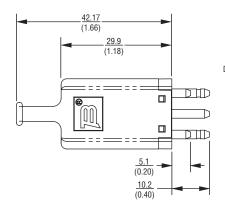


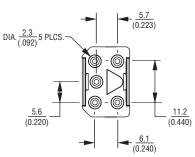
^{*}For use on DSL Systems that require balanced capacitance of ≤1 pF.

Product Dimensions

2410-3 MODULE

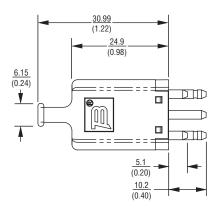






2410-7 MODULE

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





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