BOURNS®

Features

- Patent #6,327,129
- UL Listed per UL 497 (File: E53117)
- Multi-stage protection
- Quick response
- High current handling
- Compact, industry standard footprint

155HS Series Digi.Guard II – MSP® Heavy Duty Station Protector

Bourns® Model 155HS Digi.Guard II Multi-Stage Protector is a new generation telecommunications Station Protector designed to be the best all around choice for protecting copper pair voice-band and high speed data circuits. Combining the strengths of Gas Tube and solid-state protectors, the Model 155HS integrates three advanced protection technologies: a proprietary sixth-generation Gas Tube, a precision matched metal oxide varistor and a patented Switch-Grade Fail-Short mechanism.

Bourns® 2378-35 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 Model 155 is the most economical, reliable and best performing choice for overvoltage protection of paired copper communications circuits.

Characteristics

Test Methods per IEEE C62.31, UL 497, Telcordia GR-1361, applicable sections of Telcordia GR 974. UL Listed.

DC Breakdown	300-400 V
AC Breakdown, 60 Hz	300-400 V
Impulse Breakdown	
100 V/μs	600 V
1000 V/μs	650 V
Insulation Resistance @ 100 Vdc	>1 GΩ
Insertion Loss @ 100 MHz	<0.4 dB (Category 5)
Return Loss @ 100 MHz	>14 dB (Category 5)
Capacitance Line to Line @ 1 MHz	10 pF typical
Capacitance Line to Ground @ 1 MHz	20 pF typical
Impulse Reset[1] (DC Extinguishing)	
52 V, 260 mA	<10 ms[3]
135 V, 200 mA	<10 ms[3]
150 V, 200 mA	<150 ms
Impulse Life Characteristics (Per-Side, Simultaneously)	
100 A, 10/1000 μs	>3000 operations[2]
300 A, 10/1000 μs	>1000 operations[2]
500 A, 10/1000 μs	>1000 operations[4]
2,000 A, 10/250 μs	>100 operations[2]
5,000 A, 20/100 μs	>10 operations[2]
20,000 A, 8/20 μs	>10 operations[4]
AC Life Characteristics	
0.5 A rms continuous	>30 seconds
1 A rms, 1 second, 600 ft. cable	>60 seconds
1 A rms, 1 second, 1 mile cable	>60 operations
10 A rms, 1 second	>20 operations
65 A rms, 11 cycles	>1 operation[4]
120 A rms, 0.1 second	>1 operation
Life Test Criteria	
Insulation Resistance Throughout the Life Test	100 MΩ
Life Test Failures	0.0 %
Failures During Environmental Cycling w/ surges	0.0 %
Failshort (vented or non-vented gas tube)	>30 Arms, simultaneous
Operating Temperature	-55 to +85 °C

Notes:

[1] Network Applied
[2] Exceeds Telcordia 1361
[3] Surpasses Telcordia GR 974
[4] RUS (REA) PE-80

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

155HS Series Digi.Guard II – MSP® Heavy Duty Station Protector

BOURNS®

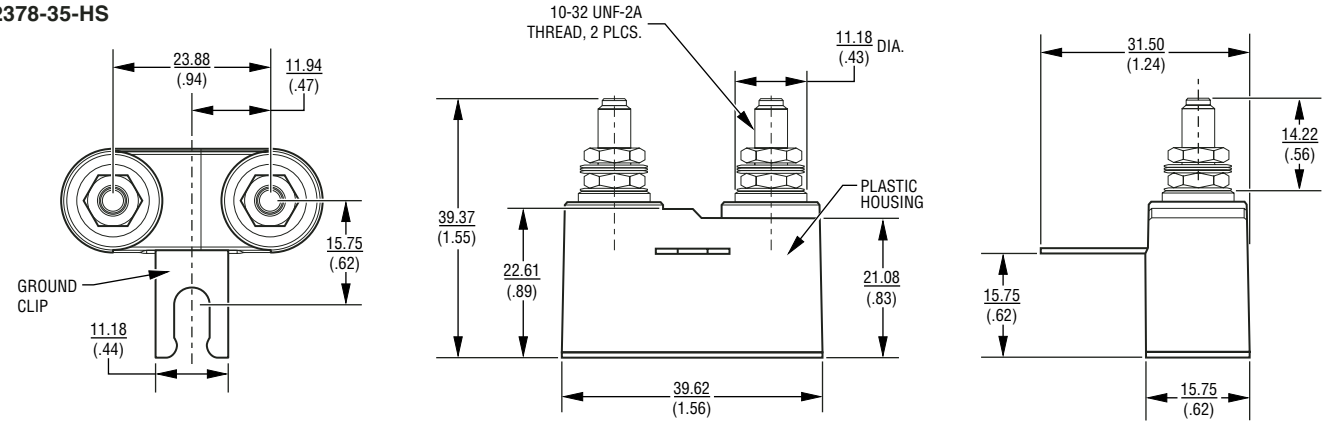
How To Order

Model 155HS-MSP ..... Part # 2378-35-HS
Model 155HS-BC* ..... Part # 2378-35-BC

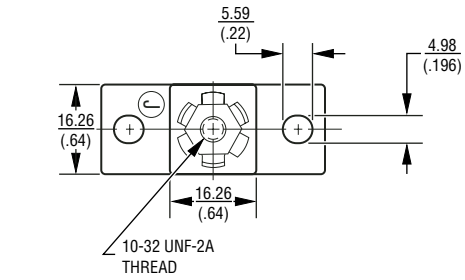
* Model 155HS-BC should be used on DSL systems that require Tip-to-Ground and Ring-to-Ground capacitive balance of ≤1 pF.

Product Dimensions

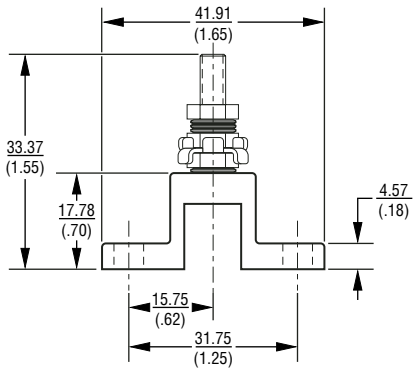
2378-35-HS



2372-02 Ground Mounting Stud (order separately)



DIMENSIONS: MM / (INCHES)



BOURNS®

Asia-Pacific:
TEL +886- (0)2 25624117
FAX +886- (0)2 25624116
Europe:
TEL +41-41 7685555
FAX +41-41 7685510
The Americas:
TEL +1-951 781-5500
FAX +1-951 781-5700
www.bourns.com