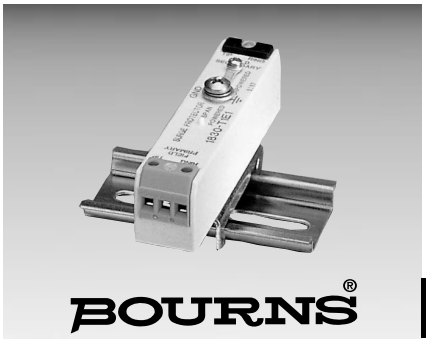


BOURNS®

Features

- Meets the T1 pulse mask as per ANSI T1.403 and the E1 mask per ITU G.703
- The protectors utilize PTC resistor technology for automatic resetting overcurrent protection and gas discharge tube technology for overvoltage protection
- Both protectors can be on-site configured for either powered or unpowered spans
- Simplicity of DIN-3 rail mounting; the rail also serves as protector ground
- Vibration proof screw-type clamping connector interface

1830 T1/E1 Surge Protector

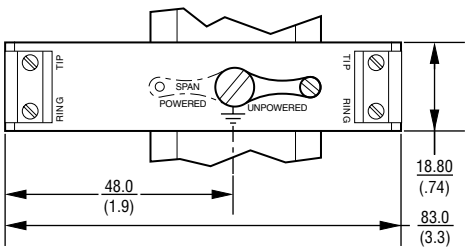
The Model 1830 Surge Protectors are designed for use on T1 and E1 lines entering Customer Premises and Wireless Transmission Facilities. The 1830 provides Secondary Protection as per UL497A. The principal use is for protection of telephone equipment against direct and induced lightning surges, power-line disturbances and ground potential rises. One Protector is used for the transmit pair and a second Protector is for the receive pair.

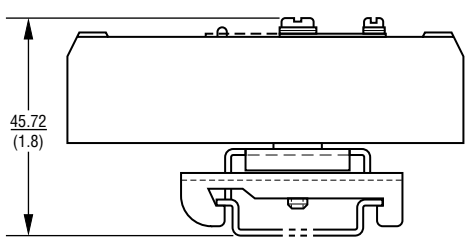
Characteristics

	Powered Span	Unpowered Span
Maximum System Voltage		
Tip-Ring	12 Vp-p	12 Vp-p
Tip/Ring-Gnd	170 Vpk	6 Vpk
DC Breakdown Rating @ <2000V/s (Tip-Ring-Gnd)	6.5 Vdc	15 Vdc
Impulse Voltage Rating @ 100V/ms (Tip/Ring-Gnd)	475 Vpk	20 Vpk
Peak Clamping Voltage (Tip-Ring)		
14 A[1] 10/1000µs	20 Vpk	20 Vpk
1 kA 8/20µs	30 Vpk	30 Vpk
5 kA 8/20µs	45 Vpk	45 Vpk
Maximum Current, per line		
@ 65°C	100 mA	100 mA
@ 85°C	66 mA	66 mA
Surge Life Tip/Ring-Gnd		
14 A[1] 10/1000 µs	100 Operations	100 Operations
500 A[1] 2/10 µs	1 Operation	1 Operation
100 A 10/1000 µs	300 Operations	300 Operations
10 kA 8/20 µs	10 Operations	10 Operations
20 kA 8/20 µs	1 Operation	1 Operation
Pulse Mask		
ANSI T1.403(1.544 Mbits/s)	Complies	Complies
CCITT G.703 (2.048 Mbits/s)	Complies	Complies
Data Attenuation		
1.544 Mbits/s	0.6 dB	0.6 dB
2.048 Mbits/s	1.4 dB	1.4 dB
Capacitance @ 1.0 MHz, Tip-Ring	<75 pF	<75 pF
Series Resistance, per line	10 Ω	10 Ω
Operating Temperature	-40°C to +85°C	-40°C to +85°C
Response Time	< 1 ns	< 1 ns
Wire Size, Input and Output	AWG 14 – 22	AWG 14 – 22
Warranty	1 Year	1 Year

[1]applies to model 1830

Product Dimensions





DIMENSIONS: MM (INCHES)

REV. F

Specifications are subject to change without notice.