



## ENHANCED SURGE PROTECTION MODULES

5 PIN - HYBRID/CAT5e MODULE SERIES

### 4B6S-30e, 4B6S-75e, 4B6FS-240e & 4B6S-300e

5 PIN - CAT5e/Hybrid - Surge Protection Module



Underwriters  
Laboratories

## Product Specifications

### UL 497 Primary Protector for Communication Circuits

The Hybrid/CAT5e Series 5 pin protector module offers the most extreme protection and fastest throughput available **(1000 Mbps/1 Gbps and Clamping Speeds of 2 - 3 Nanoseconds)** providing the bandwidth power to handle everything from POTs to VOIP, xDSL and your network.

The Hybrid/CAT5e Series employs multiple layers of protection to guard your most sensitive voice and data networks against any type of surge.

The 4 - Series features PTC (positive temperature coefficient) technology. These optional self-resetting current limiters provide effective protection from 'sneak current' faults. The PTC is vastly superior to the heat coil solution, which requires that the module be replaced after each 'sneak current' event.

Extreme, Heavy Duty Surge Handling Capabilities

Combines Gas Tube, Solid State and Silicone Avalanche Diodes for your most Sensitive Equipment

Certified Category 5e <sup>(1)</sup>

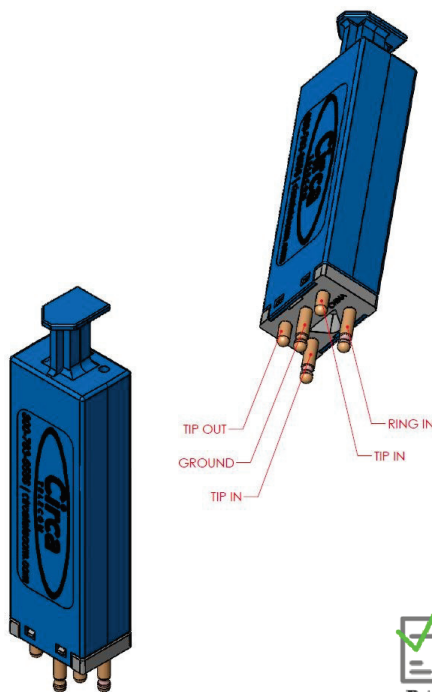
1000 Mbps/1 Gbps Speeds

UL and C UL Listed

2 - 3 Nanosecond Response Time

Integrated Test Points

ISO 9001 Certified Manufacturer



## Ordering Information

Model Number	Stock Code	Application	Color	Clamping Voltage
4B6S-30e	780105	For Your Lowest Voltage Applications	Blue	30v
4B6S-75e	780115	Digital Lines, VOIP and Network Protection	Blue	75v
4B6FS-240e	780125	T1, xDSL and Analog Systems	Blue	240v
4B6S-300e	780135	High Bandwidth Over Long Distances	Blue	300v

<sup>(1)</sup>When used in conjunction with the Circa Telecom Enhanced Series of Building Entrance Terminals



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### UL 497 Primary Protector for Communication Circuits

#### Module

DC Break Over - @ 100V/ $\mu$ S

#### Signal Rating

Frequency

Data Transfer Rate

#### Max Impulse Life

400A @ 8 x 20  $\mu$ S

10kA @ 8 x 20  $\mu$ S

#### Response Time

#### Holding Current

#### Impulse Life

@ 10A @ 10 x 1000/ $\mu$ S

@ 100A @ 10 x 1000/ $\mu$ S

#### AC Life

@ 10 A rms 1S

@ 1 A rms 1S

@ 0.5 A rms 30S

#### Capacitance

1V rms @ 1Khz, 20V DC

#### Insulation Resistance

@ 50V DC

#### Fail-Safe Operation

@ 60A rms

@ 120A rms

@ 350A rms

#### Current Limiters - Resettable PTC

Hold Current @ 20° C

Line Series Resistance

Max Interrupting Current

#### 4B6S-30e 4B6S-75e

30V/75V

0 - 100 Mhz

0 - 1 Gbps

Unlimited Operations

2

< 5 nanoseconds

50 mA/150 mA

Unlimited Operations

Unlimited Operations

> 5

> 60

> 1

< 20 pF

100M  $\Omega$

< 3 Seconds

< 0.5 Seconds

< 0.1 Seconds

180 mA

< 3  $\Omega$

3 A

#### 4B6FS-240e 4B6S-300e

240V/300V

0 - 100 Mhz

0 - 1 Gbps

Unlimited Operations

2

< 5 nanoseconds

150 mA

Unlimited Operations

Unlimited Operations

> 5

> 60

> 1

< 20 pF

100M  $\Omega$

< 3 Seconds

< 0.5 Seconds

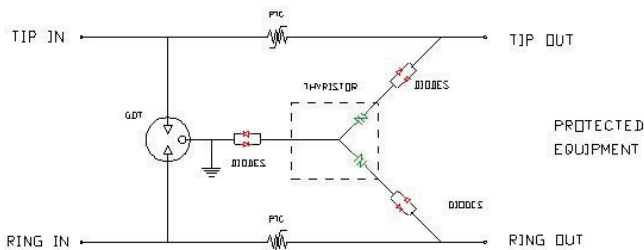
< 0.1 Seconds

180 mA

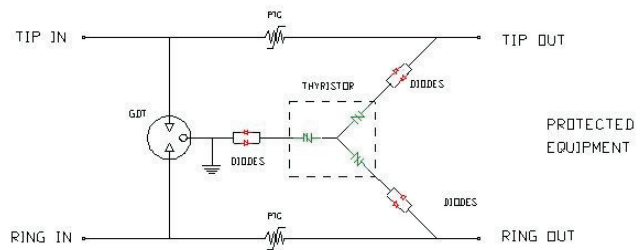
< 3  $\Omega$

3 A

#### 4B6S-30e & 4B6S-75e - Symmetrical



#### 4B6FS-240e & 4B6S-300e - Symmetrical





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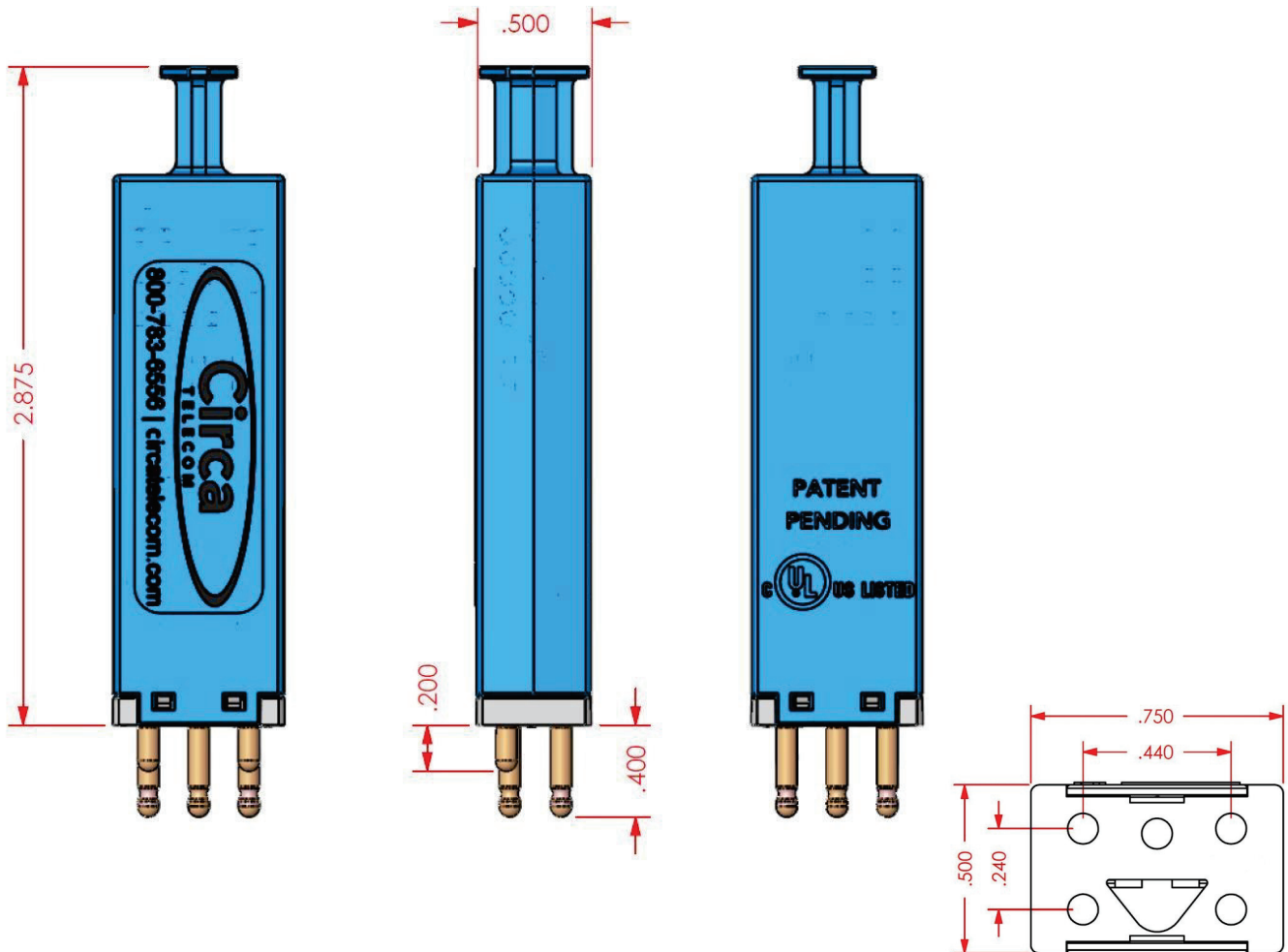
### 4B6S-30e, 4B6S-75e, 4B6FS-240e & 4B6S-300e

5 PIN - CAT5e/Hybrid - Surge Protection Module



### Physical Dimensions

UL 497 Primary Protector for Communication Circuits



### Notes

<sup>(1)</sup>When used in conjunction with the Circa Telecom Enhanced Series of Building Entrance Terminals

Pin alloy refers to tip and ring pins. Unless otherwise noted, all ground pins are tin.

Extreme, Heavy Duty Surge Handling Capabilities

1000 Mbps/1 Gbps Speeds

2 - 3 Nanosecond Response Time



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