

## UL Recognized Filtered Terminal Block

### APPLICATION

Recognized by UL, the TUSONIX Filtered Terminal Block is specifically designed to save time and money for EMI Filtering applications. By combining a filtering component with an industry standard terminal block, TUSONIX has created an effective barrier to EMI noise. TUSONIX' Filtered Terminal Blocks allow the engineer to eliminate EMI using an existing mechanical design element combined with the excellent performance of a  $\pi$  filter.

TUSONIX' commitment to excellence and service allows for customization of the filtered terminal blocks to meet your specific EMC qualifications.

Backed by more than 60 years of ceramic component production experience, TUSONIX Filtered Terminal Blocks meet your demanding requirements.

### BENEFITS

- Saves Labor and Space
- Consistent Panel Layout
- Solves EMI Problems
- Meets Specific Requirements

### FEATURES

- Filter Integral to Block
- Industry Standard Block
- Wide Range of Performance
- Customization



The TUSONIX Terminal Blocks listed in this Catalog are Recognized to UL Standard 1283 for the EMI Filter and UL Standard 1059 for the Terminal Block.

### Filtered Terminal Block Specifications

#### 1.0 Scope

This specification describes the basic performance requirements of TUSONIX Filtered Terminal Blocks.

#### 2.0 Capacitance

2.1 Measurement Conditions: Capacitance measured at  $25^{\circ}\pm 2^{\circ}\text{C}$ , 50% max R.H. and Frequency of 1 KHz @  $1\pm 0.2\text{VRMS}$ .

2.2 Capacitance: 2000pF Minimum

#### 3.0 Insertion Loss

3.1 Measurement Conditions: Insertion Loss values listed are measured in a  $50\Omega$  system at  $25^{\circ}\text{C}\pm 2^{\circ}\text{C}$  under no-load conditions.

3.2 Insertion Loss: The Insertion Loss values listed are minimum values under indicated conditions.

3.3 Listed Insertion Loss data is a measurement of filter performance in a matched  $50\Omega$  system. It is highly recommended that filter performance be verified under actual circuit operation conditions.

#### 4.0 Operating Conditions

Filters are designed to operate continuously at the temperature, voltage and current stated for each TUSONIX part number.

#### 5.0 Dielectric Withstanding Voltage

Filters shall withstand a 1500VAC voltage applied between the screw terminal and ground plane for 1 minute. Surge current shall be limited to a maximum of 50mA.

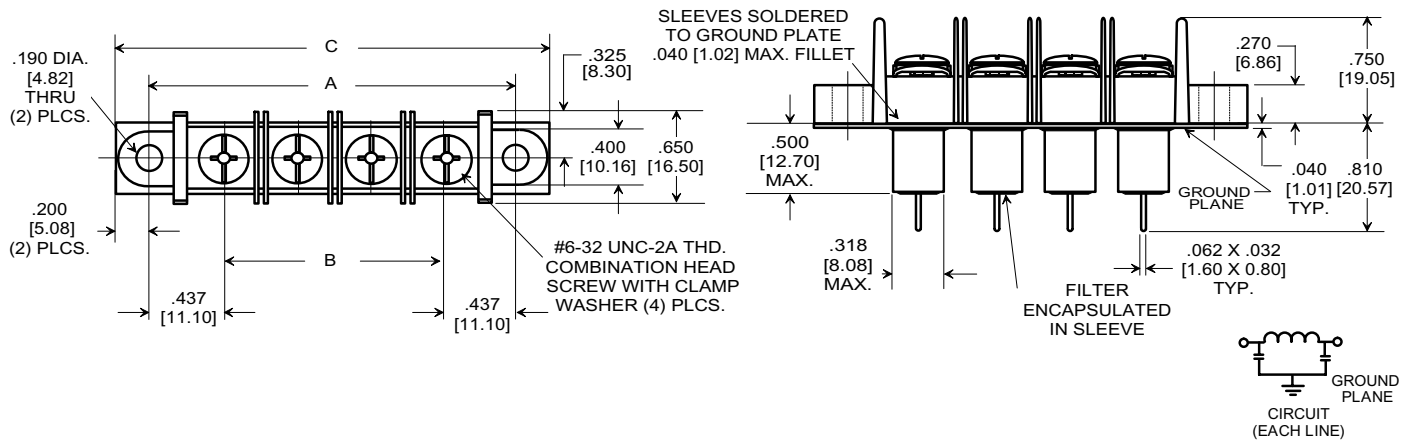
#### 6.0 Insulation Resistance

Measured at  $25^{\circ}\text{C}\pm 2^{\circ}\text{C}$  with 100VDC and charging current limited to 50mA max. The IR after two minutes maximum shall be a minimum of 10,000 Megohms.

### PRACTICAL APPLICATIONS

- Telecommunications
- Computer and Peripheral Equipment
- Industrial Process Control Equipment
- Power Supplies
- Office and Lab Equipment

## UL Recognized Filtered Terminal Block



TUSONIX Part Number	Number of Terminals	Screw Size	A		B		C	
7602-501	2	#6-32	1.312	[33.32]	.437	[11.10]	1.71	[43.5]
7603-501	3	#6-32	1.750	[44.45]	.874	[22.20]	2.15	[54.6]
7604-501	4	#6-32	2.187	[55.55]	1.311	[33.30]	2.59	[65.7]
7605-501	5	#6-32	2.625	[66.68]	1.750	[44.45]	3.02	[76.8]
7606-501	6	#6-32	3.062	[77.77]	2.185	[55.50]	3.46	[88.0]

### Mechanical Specifications

- Center Spacing: .437 [11.10]
- Screw Size: #6-32
- Wire Size: up to 12AWG, Ø.081[2.05]
- Molded Material: Thermoplastic(Valox), UL rated 94 V-0.
- Tightening Torque: 9 in-lbs [1.02Nm]
- Terminal: Brass, Tin-plated

### UL Recognition

- EMI Filters recognized to UL Standard 1283
- Terminal Block recognized to UL Standard 1059
- Reference UL File Number E201344

### Electrical Specifications

- Operating Temperature: -55°C to +125°C
- Working Voltages: Up to 250 VAC
- Capacitance: 2000pF Minimum
- Dielectric Withstanding Voltage: 1500VAC
- Insulation Resistance: minimum 10,000 Megohms
- Current Rating: 20A
- DC Resistance: 10 milliohms max
- Minimum Insertion Loss, in 50 Ohm Circuit (dB):

10 MHz	100 MHz	1 GHz	10 GHz
5dB	50dB	60dB	65dB

(For additional Insertion loss values, contact the factory)