



SURE/FIRE® UNIVERSAL VAC PROTECTOR

120 VAC Surge Suppressor/Filter With Ground Transient Protection Hard Wire Version

(International 230/240 VAC Versions Available Upon Request)

BRAVO STOCK CODE: UVAC1

Product Specifications

DATE (DDMMYY):	28-1-05		TYPE	20 Amp VAC Hard Wire
STATUS:	PRELIMINARY		MODEL	UVAC1
ENGINEER:	D WEAVER		REV.	01
MANAGER:	D WEAVER		PAGES	4

1 Introduction

This specification defines the performance characteristics of a VAC ground transient filter designated as UVAC1.

2 Specification

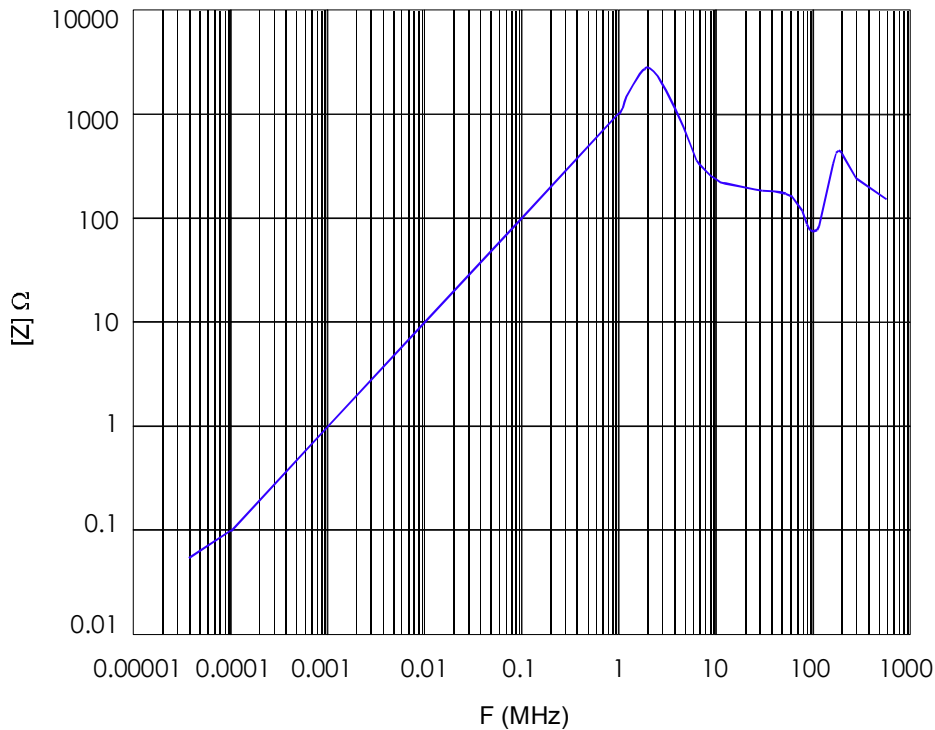
(see drawing, page 4)

3 Performance

3.1 Impedance

The following graph shows impedance measured over a frequency range from 40Hz to 600MHz. The Impedance should be less than 0.1 Ohm at the 60 Hz mains cycle and peak above 1MHz.

[Z] vs Freq.



3.2 Inductance

Bravo Communications, Inc. • 3463 Meadowlands LN, San Jose, CA 95135 U.S.A. • PH: 408-297-8700 • Fax: 408-297-8701
www.bravobravo.com

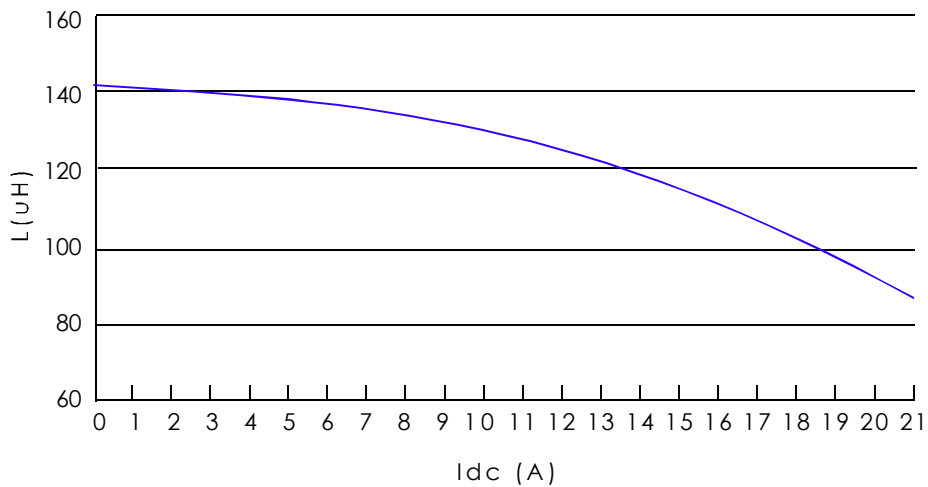
3.2.1 Common Inductance

- Available for 120 VAC Applications with maximum continuous current of 20A
- Utilizes a multi-stage surge suppression circuit that provides 60,000 amps of surge suppression
- EMI/RFI filtering from 0.1HZ to 100MHz
- Power conditioning maintains clean power +/- 15% of nominal power input

3.2.2 L vs Current

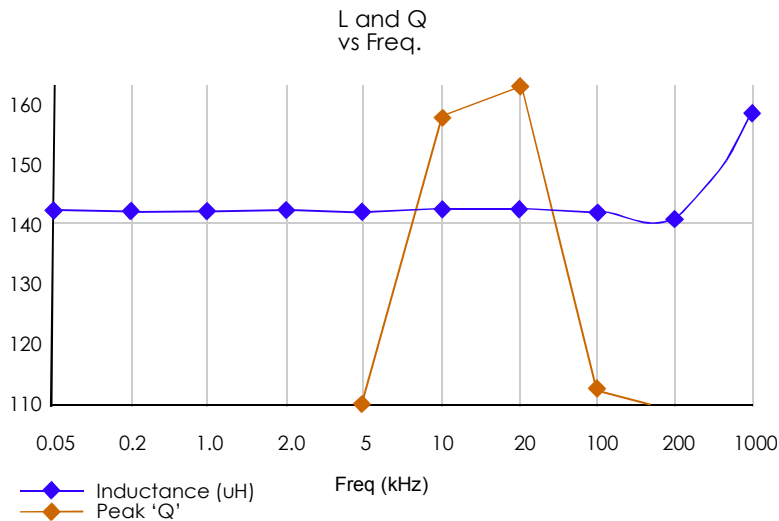
The following progressive plot shows the effect of the current on the inductance value of the assembly. The device should operate safely up to 20A. The inductance should not decrease to less than 100uH with a 15A resistive load.

L vs Idc



3.2.3 L vs Frequency

The following plot shows the effect of frequency on L and Q. A peak Q of >150 should be recorded between 20~100kHz.



3.3 Construction

The continuous attenuator circuit is wound and configured using a 1.8mm solid copper conductor. The lead wires are 12AWG UL1015. All joins in the wire are made by mechanical in-line splices. Splice points are covered with Mylar tape prior to final assembly. When ground circuit is inserted into the case the whole assembly is potted using an epoxy 9001 A+B compound. The finished product is shown.

