

REVISIONS					
ZONE	LTR	DESCRIPTION	ECO NO.	DATE	APPROVED
—	A	PROD REL	628	6 JAN 23	B. Ryan

# TRANSIENT SUPPRESSOR SPECIFICATIONS

FOR 120VAC, 15A, 50/60Hz

MODEL ACP100BWN3

UNLESS OTHERWISE SPECIFIED, DIM. IN INCHES BEFORE PLATING.  
TOLERANCES ON: DECIMALS  
FRACTIONS=± 0.XX=± 0.  
ANGLES= 0.XXX=± 0.

MATERIAL:

DRAWN *R. WATSON* DATE *1-6-13*  
CHECKED *MLH* *1/2/13*  
ENGRG APPD *BDR* *6 JAN 13*  
PROJ APPD *MLH* *1/2/13*  
APPROVED

**TRANSTECTOR®  
SYSTEMS**

MONTEREY PARK, CALIF. 91754

**ABSOLUTE  
TRANSIENT  
PROTECTION**

TITLE  
SPECIFICATION  
ACP100BWN3

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1.0 **SCOPE:** This specification covers the detail requirements for a high-speed, solid-state transient suppressor designed to protect electronic equipment and systems from transient overvoltages.

2.0 **PURPOSE:** This device is to eliminate the damaging effects to equipment from transient overvoltages which can appear on grounded 120VAC, 15A, 50/60 Hz power lines.

3.0 **GENERAL DESCRIPTION:** The ACP100BWN3 is a solid-state transient suppressor for wire-in use on grounded 120VAC, 15A, 50/60Hz power lines. The ACP100BWN3 is both bi-polar and bi-directional; i.e., it can suppress transients of either polarity and from either direction. (source or load)

The ACP100BWN3 uses high speed silicon avalanche diodes as the suppression devices.

A fuse in series with the load will open if the suppressors fail due to excessive energy dissipation, and a normally "on" lamp will turn off, indicating loss of protection. Power will be off at the load.

4.0 **OPERATION:** When a transient overvoltage is sensed, the silicon avalanche diode (a passive, high-speed constant voltage device) goes into conduction while maintaining the voltage at a sufficiently low value to protect the attached equipment.

#### 5.0 **PERFORMANCE REQUIREMENTS:**

5.1 **MECHANICAL:** The construction and physical characteristics of the suppressor are as outlined herein.

5.1.1 **Enclosure Description:** The suppressor is enclosed within a rigid plastic case made from UL recognized plastic. The enclosure has the physical measurements shown on sheet 4.

5.1.2 **Installation Requirements:** The ACP100BWN3 is intended to be installed inside of a user provided enclosure. A four position terminal strip is provided for power connections.

5.1.3 **Material:** The material shall be as specified herein. However, when a definite material is not specified, a material shall be used which shall enable the device to meet the performance specifications defined herein.

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5.2 **ELECTRICAL:** The suppressor shall perform electrically within the conditions and specifications defined herein.

5.2.1 **Suppressor Voltage Level (Minimum):** The ACP100BWN3 has the following suppressor voltage level:

Hot to Neutral  $\pm 220\text{v} \pm 5\%$

5.2.2 **Suppressor Voltage Level (Maximum):**

Hot to Neutral  $\pm 330\text{v}$

5.2.3 **Peak Power Dissipation:** The peak power dissipation for a 1 x 1000 microsecond waveform is 12,000 watts.

5.2.4 **Response Time:** Less than 5 nanoseconds

5.2.5 **Standby Power:** Less than 0.5 watt

5.2.6 **Leakage Current:** Hot to Neutral @ 120vrms - less than 5 microamps.

5.3 **ENVIRONMENTAL:**

5.3.1 **Operating and Storage Temperature:**  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$

5.3.2 **Humidity:** Less than 95%

6.0 **PREPARATION FOR DELIVERY:** Domestic and short-term storage.

6.1 **PRESERVATION:** Preservation shall be sufficient to afford protection during shipment and short-term storage.

6.2 **PACKING:** Packing shall be accomplished in the manner which will insure acceptance by common carrier at the lowest rate and will afford protection against physical damage during shipment.

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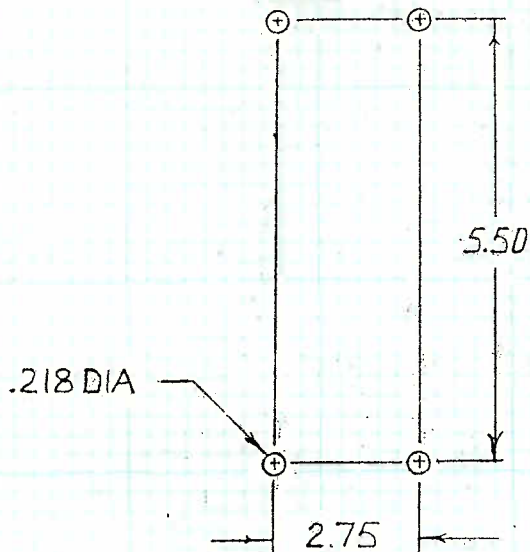
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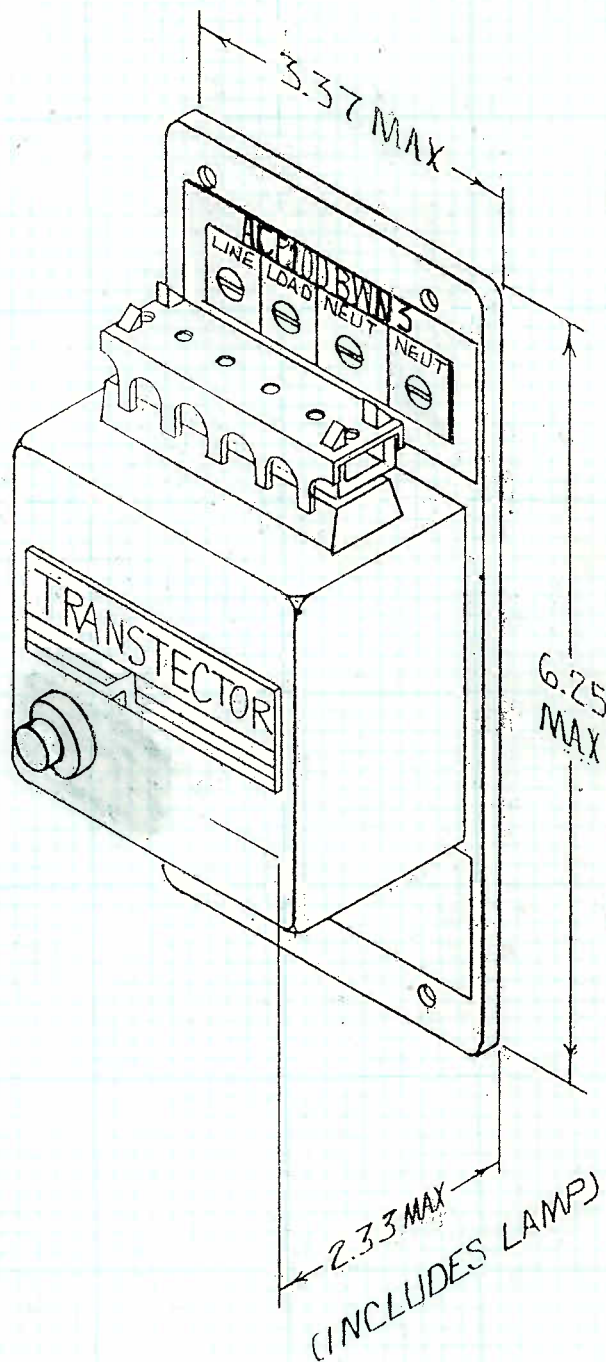
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# RECOMMENDED MOUNTING HOLE PATTERN



MOUNT UNIT AS REQUIRED  
—SEE PATTERN—

ACP 100BWN3



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