

## SAFETY ORGANIZATIONS

THIS FILTER HAS BEEN FORMALLY RECOGNIZED, CERTIFIED OR APPROVED BY THE LISTED AGENCY. THEREFORE, ALL TEST/REQUIREMENTS SPECIFIED IN THE LATEST REVISION OF THE FOLLOWING AGENCY STANDARDS HAVE BEEN MET:

UL RECOGNIZED: UL 1283  
CSA CERTIFIED: CSA C22.2 No. 8  
VDE APPROVED: EN 60939-2

## OPERATING SPECIFICATIONS

LINE CURRENT/VOLTAGE: 6 AMP/40°C 120/250 VAC, 50-60Hz  
6 AMP/40°C, 250 VAC, 50-60Hz  
6 AMP/40°C, 250 VDC

MAXIMUM LEAKAGE CURRENT,  
EACH LINE TO GROUND: 0.22mA @ 120V 60Hz  
0.36mA @ 250V 50Hz

OPERATING AMBIENT TEMP. RANGE: -10°C TO +40°C @ RATED CURRENT,  $I_r$ .

IN AN AMBIENT,  $T_a$ , HIGHER THAN 40°C, THE MAXIMUM OPERATING CURRENT,  $I_o$ , IS AS FOLLOWS:

$$I_o = I_r \sqrt{\frac{85 - T_a}{45}}$$

## RELIABILITY SPECIFICATIONS:

STORAGE TEMPERATURE: -40°C TO +85°C  
HUMIDITY: 21 DAYS @ 40°C 95% RH.  
CURRENT OVERLOAD TEST: 6 TIMES  $I_r$  FOR 8 SECONDS

## TEST SPECIFICATIONS:

INDUCTANCE: 1.0 mH NOMINAL  
CAPACITANCE: (MEASURED @ 1KHz, 0.250VAC MAX., 25°C±1°C)  
LINE TO GROUND: 0.0056  $\mu$ F±20%  
LINE TO LINE: 1.0014  $\mu$ F±20%  
DISCHARGE RESISTOR: 330K  $\Omega$   
L/C AND L/L I.R.  
NO DISCHARGE RESISTOR: 6000H $\Omega$  (MIN.) @ 100VDC, 20°C AND 50% RH

## RECOMMENDED RECEIVING INSPECTION HIPOT:

LINE TO GROUND: 1500 VAC FOR 1 MINUTE  
LINE TO LINE: 1450 VDC FOR 1 MINUTE

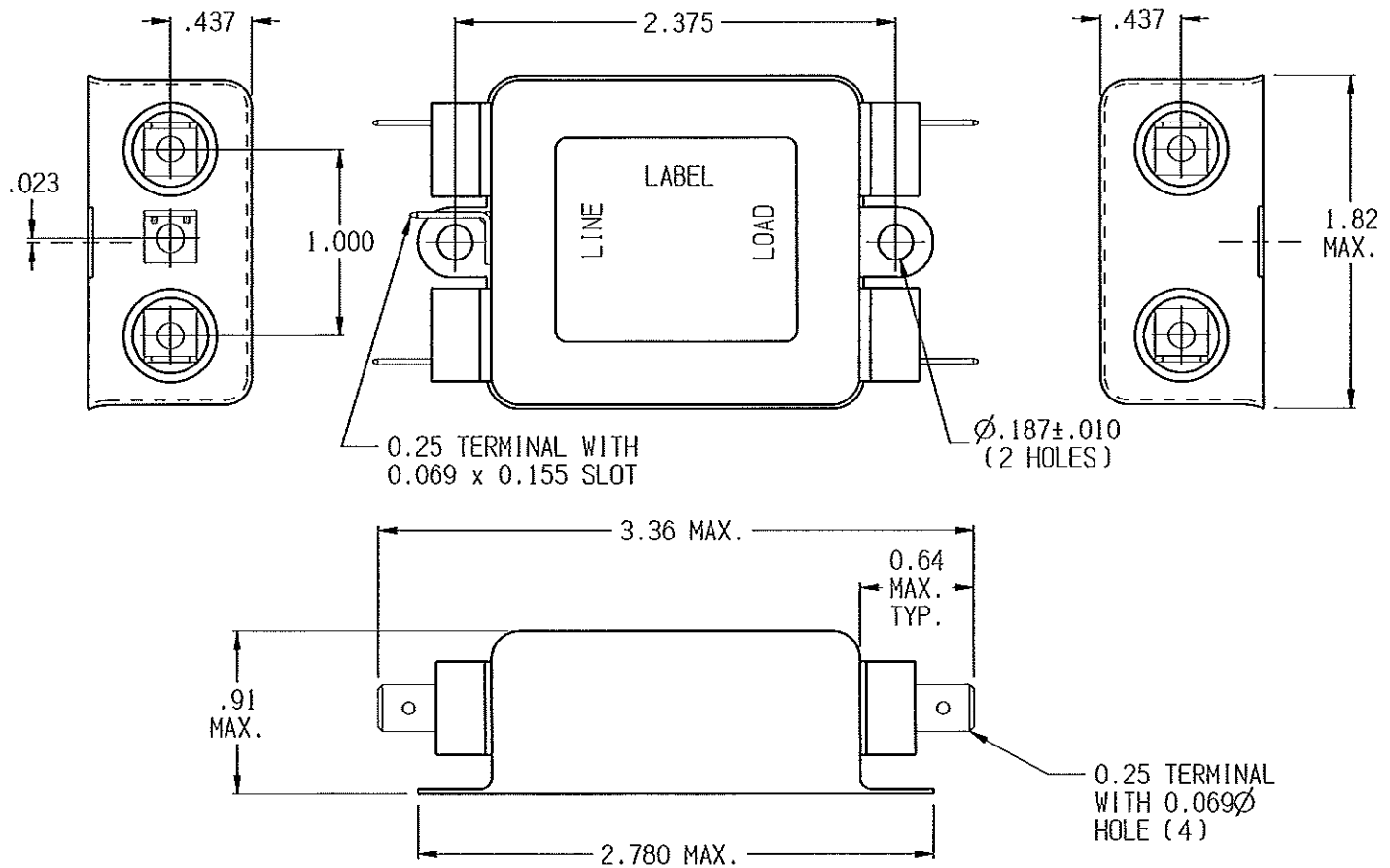
## FILTER APPROVAL:

THE BEST WAY TO SELECT AND QUALIFY A FILTER IS FOR YOUR ENGINEERING TO TEST THE UNIT IN YOUR EQUIPMENT.

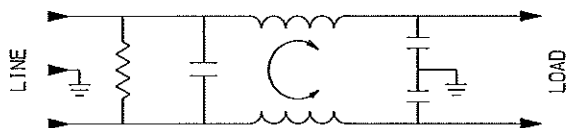
## CUSTOMER DRAWING

CATALOG # 6ESB1

| ECN#      | APPRVD | DATE    |
|-----------|--------|---------|
| 10-006843 | PJO    | 06APR10 |



## ELECTRICAL SCHEMATIC



## 50 $\Omega$ - 50 $\Omega$ (MINIMUM) INSERTION LOSS

| FREQUENCY<br>kHz | .01 | .03 | .05 | .1 | .15 | .5 | 1.0 | 2.0 | 5.0 | 10.0 | 20.0 | 30.0 |
|------------------|-----|-----|-----|----|-----|----|-----|-----|-----|------|------|------|
| COMMON<br>dB     | -   | 3   | 8   | 13 | 17  | 31 | 37  | 40  | 47  | 50   | 58   | 62   |
| DIFF.<br>dB      | 5   | 14  | 20  | 25 | 29  | 41 | 49  | 47  | 50  | 60   | 74   | 72   |

PARTS SHALL COMPLY WITH TYCO ELECTRONICS 138-702 SPECIFICATION FOR HAZARDOUS SUBSTANCES

UNLESS OTHERWISE SPECIFIED  
TOLERANCE TO BE  $\pm 0.025$   
MATERIAL & FINISH: AS SUPPLIED

## NOTES:

**Tyco Electronics**  
CORDON PRODUCTS, 620 S. BUTTERFIELD RD., HUNDELEIN, IL 60060

## POWER LINE FILTER

TYCO ELECTRONICS PART NO. 1-1609034-1

|              |               |                       |        |
|--------------|---------------|-----------------------|--------|
| SCALE: 1:1   | DATE: 23NOV09 | DRAWING NUMBER: 6ESB1 | REV. A |
| DRW. BY: LJO | DATE: PJO     |                       |        |

6esb1-A.cxd

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