

**CUSTOMER DRAWING**

**CATALOG # 16WGB7**

| ECN #     | APPRVD.            | DATE    |
|-----------|--------------------|---------|
| 09-020709 | <i>[Signature]</i> | 09SEP09 |

**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: 16 AMP, 120/250 VAC,  
16 AMP/40°C, 250 VAC

LINE FREQUENCY: 50-60Hz

MAXIMUM LEAKAGE CURRENT,  
EACH LINE TO GROUND: 0.76 mA @ 120V 60Hz  
1.27 mA @ 250V 50Hz

OPERATING AMBIENT TEMP. RANGE: -10°C TO +40°C @ RATED CURRENT, I<sub>r</sub>.

IN AN AMBIENT, T<sub>a</sub>, HIGHER THAN 40°C, THE MAXIMUM OPERATING CURRENT, I<sub>o</sub>, IS AS FOLLOWS:

$$I_o = I_r \sqrt{\frac{100 - T_a}{60}}$$

**RELIABILITY SPECIFICATIONS:**

STORAGE TEMPERATURE: -40°C TO +100°C  
HUMIDITY: 21 DAYS @ 40°C 95% RH.  
CURRENT OVERLOAD TEST: 6 TIMES I<sub>r</sub> FOR 8 SECONDS

**TEST SPECIFICATIONS:**

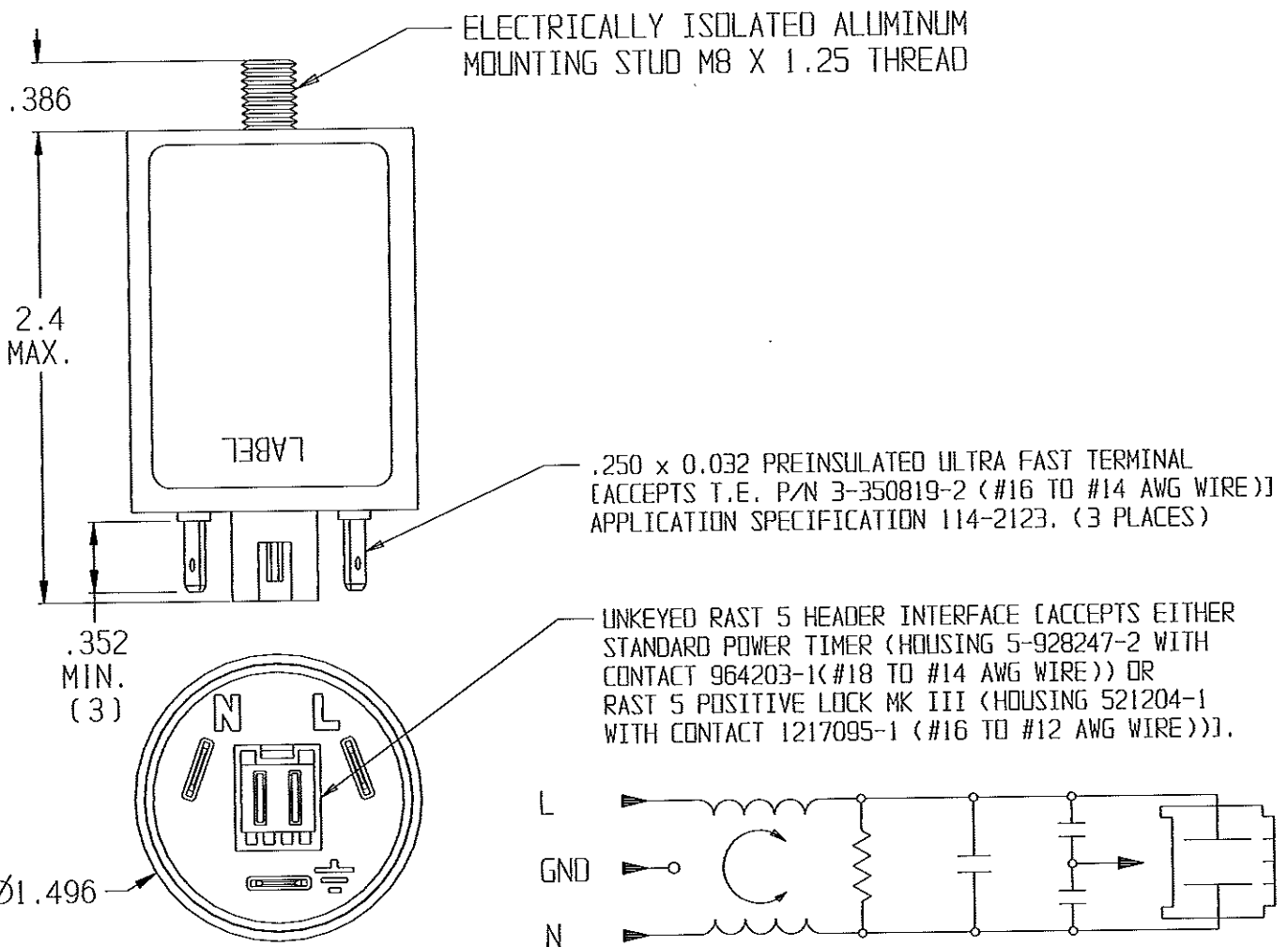
INDUCTANCE: 1.2 mH NOMINAL  
CAPACITANCE: (MEASURED @ 1KHz, 0.250VAC MAX., 25°C±1°C)  
LINE TO GROUND: 0.02 µF ±20%  
LINE TO LINE: 0.475 µF ±20%  
DISCHARGE RESISTOR: 680K Ω  
L/G AND L/L I.R. NO DISCHARGE RESISTOR: 6000M Ω (MIN.) @ 100VDC, 20°C AND 50% RH

**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.



**50 Ω - 50 Ω (MINIMUM) INSERTION LOSS**

| FREQUENCY MHz | .05 | .1 | .15 | .5 | 1  | 2  | 5  | 10 | 20 | 30 | / | / |
|---------------|-----|----|-----|----|----|----|----|----|----|----|---|---|
| COMMEN dB     | 11  | 16 | 21  | 33 | 39 | 44 | 53 | 55 | 37 | 30 | / | / |
| DIFF. dB      | 14  | 19 | 22  | 33 | 41 | 51 | 50 | 45 | 52 | 45 | / | / |

PARTS SHALL COMPLY WITH TYCO ELECTRONICS 230-702 SPECIFICATION FOR HAZARDOUS SUBSTANCES

UNLESS OTHERWISE SPECIFIED TOLERANCE TO BE ±0.025 MATERIAL & FINISH: AS SUPPLIED

**Tyco Electronics**  
CORPORATION PRODUCTS, 620 S. BUTTERFIELD RD., MANLEIN IL 60050

**POWER LINE FILTER**

TYCO ELECTRONICS PART NO. 3-1609090-9

|                      |                        |   |               |   |                             |            |               |                        |        |
|----------------------|------------------------|---|---------------|---|-----------------------------|------------|---------------|------------------------|--------|
| SHEET SIZE: <b>A</b> | THIRD ANGLE PROJECTION | THIS INFORMATION IS CONFIDENTIAL AND PROPRIETARY TO TYCO ELECTRONICS CORPORATION AND ITS WORLDWIDE SUBSIDIARIES AND AFFILIATES. IT MAY NOT BE DISCLOSED TO ANYONE OTHER THAN TYCO ELECTRONICS PERSONNEL, WITHOUT WRITTEN AUTHORIZATION FROM TYCO ELECTRONICS CORPORATION, HARRISBURG, PENNSYLVANIA USA. | CVM AVAILABLE | YES <input checked="" type="checkbox"/> | NO <input type="checkbox"/> | SCALE: NTS | DATE: 23MAR07 | DRAWING NUMBER: 16WGB7 | REV. 6 |
|----------------------|------------------------|---|---------------|---|-----------------------------|------------|---------------|------------------------|--------|