

### 3-1609037-2 Product Details



**3-1609037-2**  
(20EHZ1)

TE Internal Number: 3-1609037-2

 Active

#### EMI/RFI Filters and Accessories

 Always EU RoHS/ELV Compliant (Statement of Compliance)

#### Product Highlights:

- Filter - EMI/RFI
- Filter Type = Power Line
- HZ Series
- Medical Application
- Mount Style = Flanged

#### Documentation & Additional Information

##### Product Drawings:

- [CUSTOMER DRAWING 20EHZ1](#) (PDF, English)

##### Catalog Pages/Data Sheets:

- [1654001\\_CORCOM\\_PRODUCT\\_GUIDE\\_HZ\\_SERIES](#) (PDF, English)

##### Product Specifications:

- None Available

##### Application Specifications:

- None Available

##### Instruction Sheets:

- None Available

##### CAD Files:

- None Available

##### Additional Information:

- [Product Line Information](#)

##### Related Products:

- [Tooling](#)

#### Product Features (Please use the Product Drawing for all design activity)

##### Product Type Features:

- [Product Type](#) = Filter - EMI/RFI
- [Filter Type](#) = Power Line
- [Series](#) = HZ
- [Ground Choke Option](#) = Without
- [Filtered](#) = Yes
- [Ground Option](#) = None

##### Electrical Characteristics:

- [Current Rating \(A\)](#) = 20
- [Voltage ≤ \(VAC\)](#) = 250
- [Leakage Current \(Line-to-Ground\) Max. @ 120 VAC 60 Hz \(µA\)](#) = 2
- [Leakage Current \(Line-to-Ground\) Max. @ 250 VAC 50 Hz \(µA\)](#) = 5

##### Termination Features:

- [Terminal Input - Output Combination](#) = 1/4" Faston - 1/4" Faston

##### Body Features:

- [Mount Style](#) = Flanged
- [Terminal Style Output](#) = Straight

##### Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS compliant, ELV compliant
- [Lead Free Solder Processes](#) = Not relevant for lead free process
- [RoHS/ELV Compliance History](#) = Always was RoHS compliant
- [Approved Standards](#) = VDE Approved, UL Recognized, CSA Certified

##### Conditions for Usage:

- [Facility Installation](#) = No
- [Need Min Size With IEC Connector](#) = No
- [Need Optional Switch, Fusing, Or Voltage Selector](#) = No

##### Operation/Application:

- [Application](#) = Medical

##### Other:

- [Brand](#) = Corcom

**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: 20 AMP, 120/250 VAC

LINE FREQUENCY: 50-60Hz

MAXIMUM LEAKAGE CURRENT, EACH LINE TO GROUND:  
 2µA @ 120V 60Hz  
 5µA @ 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:

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

**RELIABILITY SPECIFICATIONS:**

STORAGE TEMPERATURE: -40°C TO +85°C  
 HUMIDITY: 21 DAYS @ 40°C 95% RH.  
 CURRENT OVERLOAD TEST: 6 TIMES I<sub>r</sub> FOR 8 SECONDS

**TEST SPECIFICATIONS:**

INDUCTANCE: 4.55 mH NOMINAL  
 CAPACITANCE: (MEASURED @ 1KHz, 0.250VAC MAX., 25°C±1°C)

LINE TO LINE: 0.74 µF±20%  
 DISCHARGE RESISTOR: 470K Ω  
 L/G AND L/L I.R.  
 NO DISCHARGE RESISTOR: 6000MΩ (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

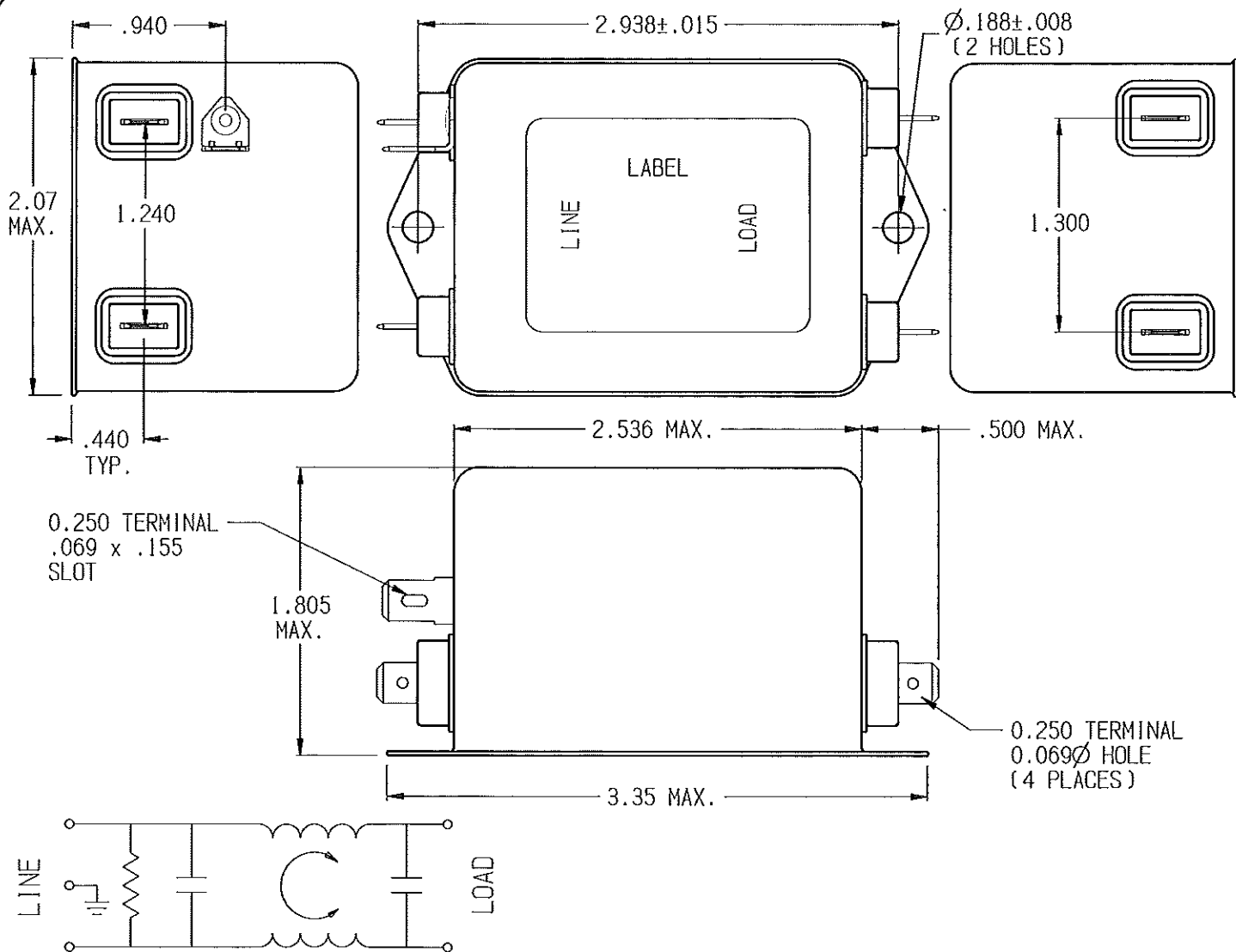
**FILTER APPROVAL:**

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

**CUSTOMER DRAWING**

CATALOG # 20EHZ1

ECN#	APPRVD	DATE
10-023669	PJO	B



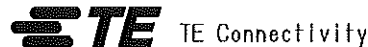
**50 Ω - 50 Ω (MINIMUM) INSERTION LOSS**

FREQUENCY kHz	.01	.05	.1	.15	.5	1.0	2.0	5.0	10	20	30	/
COMMON dB	5	19	24	28	31	29	20	14	9	6	4	/
DIFF. dB	/	/	11	9	54	77	80	74	69	58	47	/

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

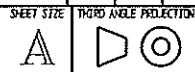
UNLESS OTHERWISE SPECIFIED  
 TOLERANCE TO BE ±0.025  
 MATERIAL & FINISH: AS SUPPLIED

**NOTES:**



**POWER LINE FILTER**

TYCO ELECTRONICS PART NO. 3-1609037-2			
SCALE: 1:1	DATE: 31AUG10	DRAWING NUMBER: 20EHZ1	REV. B
DRY. BY: LJO	ORIG: PJO		



THIS INFORMATION IS CONFIDENTIAL AND PROPRIETARY TO TYCO ELECTRONICS CORPORATION AND ITS WORKFORCE 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.