



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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**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/40°C 120/250 VAC, 50-60Hz  
 20 AMP/40°C, 250 VAC, 50-60Hz  
 20 AMP/40°C, 250 VDC

MAXIMUM LEAKAGE CURRENT, EACH LINE TO GROUND:  
 0.75mA @ 120V 60Hz  
 1.25mA @ 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: 0.9 mH NOMINAL  
 CAPACITANCE: (MEASURED @ 1KHz, 0.250VAC MAX., 25°C±1°C)  
 LINE TO GROUND: 0.0199 μF±20%  
 LINE TO LINE: 1.005 μF±20%  
 DISCHARGE RESISTOR: 330K 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

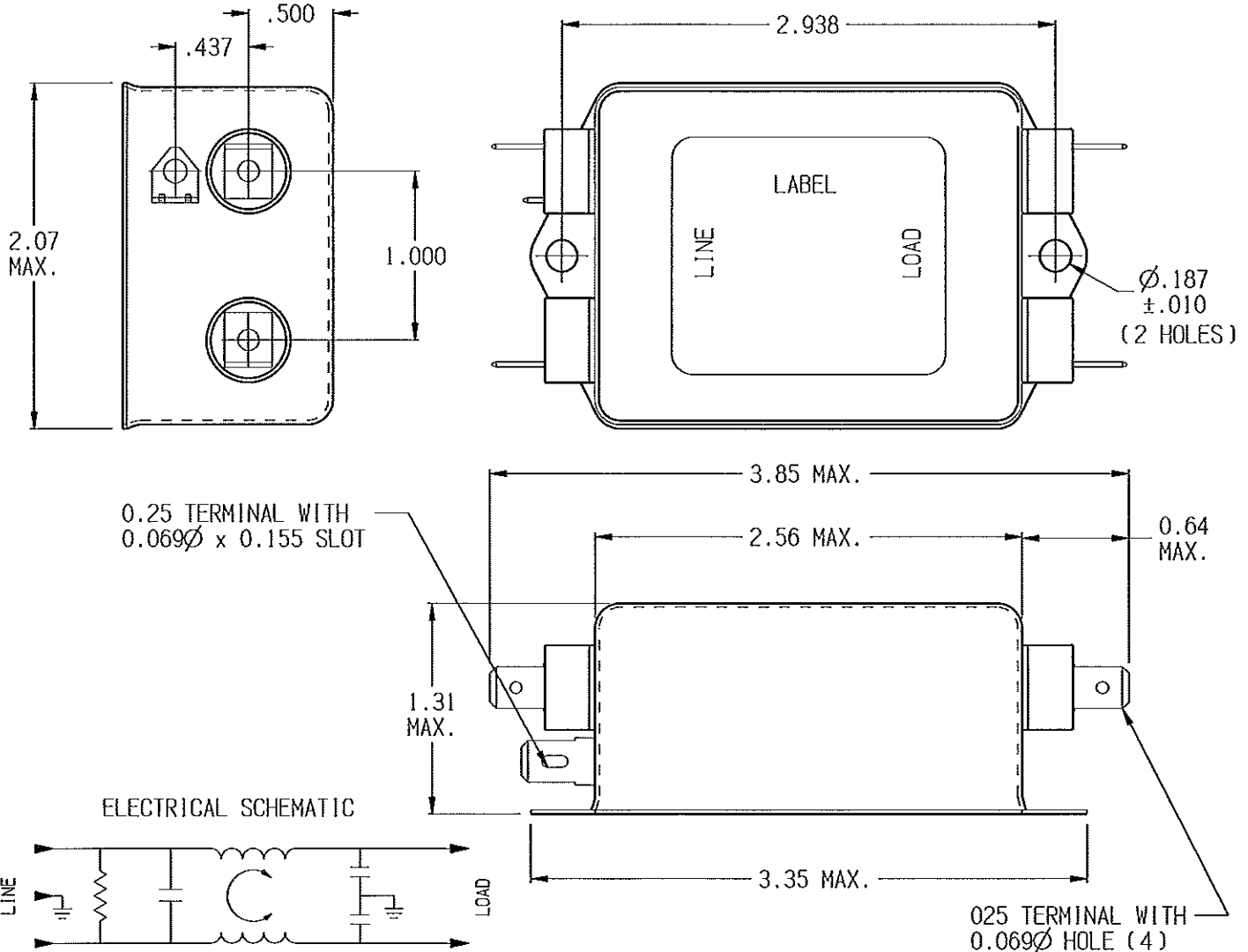
**FILTER APPROVAL:**

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

**CUSTOMER DRAWING**

CATALOG # 20VSB1

ECN#	APPRVD	DATE
10-006843	PJO	07APR10



50 Ω - 50 Ω (MINIMUM) INSERTION LOSS												
FREQUENCY kHz	.01	.03	.05	.1	.15	.5	1.0	2.0	5.0	10.0	30.0	
COMMON dB	-	3	7	14	19	37	45	47	50	60	48	40
DIFF. dB	5	15	20	26	29	40	42	60	68	70	70	67

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PARTS SHALL COMPLY WITH TYCO ELECTRONICS 138-702 SPECIFICATION FOR HAZARDOUS SUBSTANCES UNLESS OTHERWISE SPECIFIED TOLERANCE TO BE ±0.025 MATERIAL & FINISH: AS SUPPLIED

**Tyco Electronics**  
 CONCOH PRODUCTS, 620 S. BUTTERFIELD RD. MADEIRA IL 60050

**POWER LINE FILTER**

TYCO ELECTRONICS PART NO. 1-1609034-9

SCALE: 1:1 DATE: 23NOV09 DRAWING NUMBER: 20VSB1 REV. A  
 DRW. BY: LJD ORG: PJO

20VSB1-A.cxd