



YONGCHENG

SPECIFICATION FOR APPROVAL

DATE: AUG 05, 2009

SAMPLE Q'TY 6 PCS

CUSTOMER : ACUWA

CUSTOMER P/N: AM-017

YONGCHENG P/N : YL-1S049H

DESCRIPTION : 1 PORT RJ-45 JACK With 10/100 Base-T Magnetics Module

APPROVED SIGNATURES	
YONGCHENG APPROVED SIGNATURES	CUSTOMER APPROVED SIGNATURES
APPROVED BY: LiaoZongCheng	APPROVED BY:
DATE: 2009/08/05	DATE:
APPROVED No. :	APPROVED No. :

(ZUNYI)YONGCHENG ENTERPRISE INC.

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**SINGLE RJ45 CONNECTOR MODULE WITH INTEGRATED
10/100 BASE-TX MAGNETICS**

P/N:YL-1S049H DATA SHEET(REFERENCE ACUWA AM-017)



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Feature



- ◆ RJ-45 connector integrated with X'FMR/impedance resistor/high voltage capacitor.
- ◆ Size same as RJ-45 connector to save PCB board space
- ◆ Reduce EMI radiation, improve EMI performance.
- ◆ Pb free Soldering Heat Withstanding
- ◆ Design for 100 BASE transmission over UTP-5 cable.
- ◆ Operating temperature range : 0 to +70 .
- ◆ Storage temperature range: 0 to +85 .

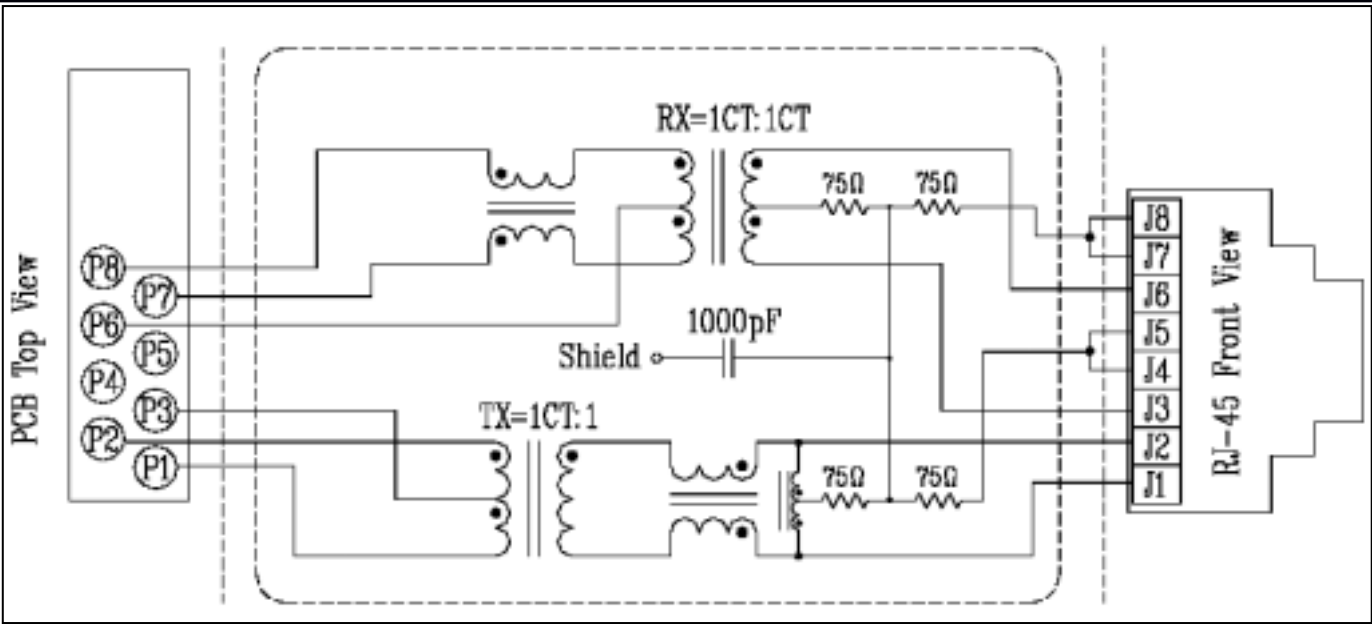
Electrical Specifications @ 25°C

Part Number	Turns Ratio TX/RX(+/-3%)	CW/W (PF MAX)	CMRR (dB MIN)			L/L(uH MAX)	OCL(uH Min) 100KHz/0.1V with 8Ma DC BIAS	HI-POT (Vrms)
			1-30MHz	30-60MHz	60-125MHz			
YL-1S049H	1CT:1/1CT:1CT	28	-30	-25	-20	0.4	350	1500

Continue

Part Number	Insertion Loss (dB Max)	Return Loss (dB MIN)					Cross talk (dB Min)		
	0.3-100MHz	30MHz	40MHz	50MHz	60MHz	80MHz	0.3- 30MHz	30- 60MHz	60- 100MHz
YL-1S049H	-1.15	-16	-14	-13.5	-13	-10	-40	-35	-30

Schematic



SINGLE RJ45 CONNECTOR MODULE WITH INTEGRATED 10/100 BASE-TX MAGNETICS

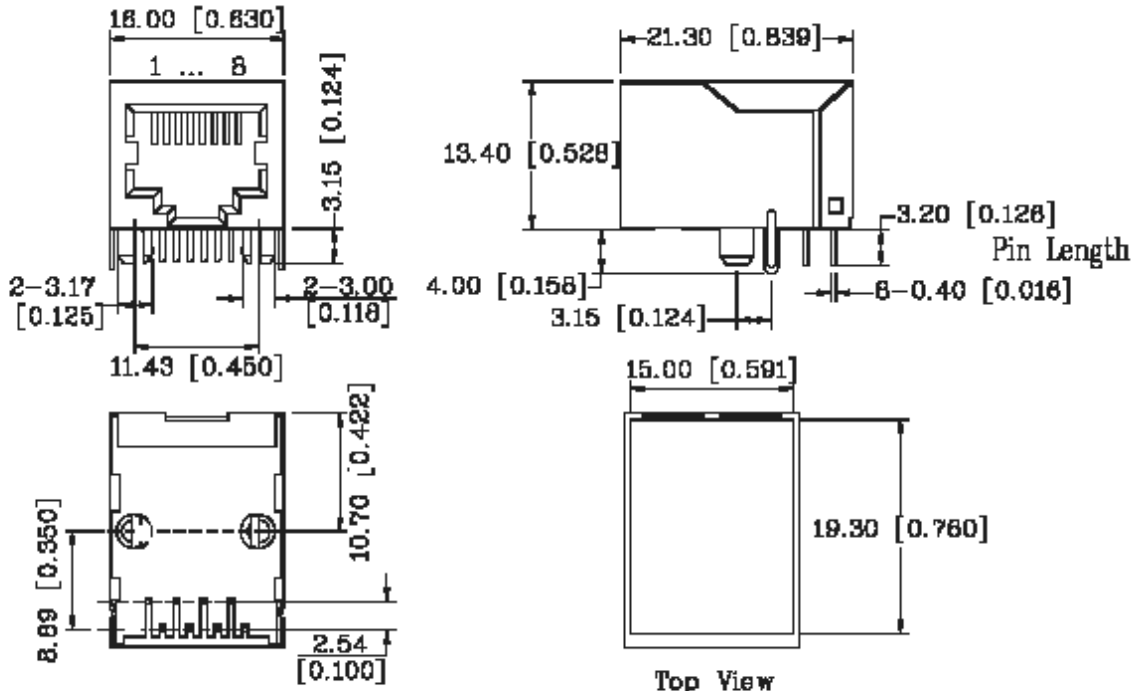
P/N:YL-1S049H DATA SHEET(REFERENCE ACUWA AM-017)



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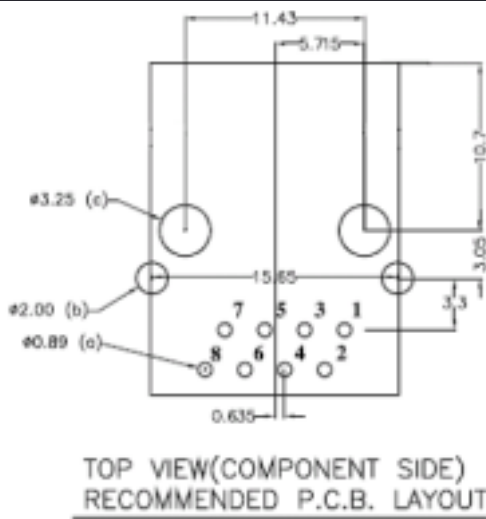
Mechanicals



Units: mm[Inches] Tolerances: $xx.x0 \pm 0.25 [0.010]$
 $0.xx \pm 0.05 [0.002]$

1. Plastic Material : Thermoplastic (UL 94V-0), Black Housing
2. Metal Shield : Brass , 20u inches thick Nickel
3. Spring Wire : 0.45mm Dia. Phosphor bronze with selective gold plating
4. Solder Pin : 0.4x0.4mm, Phosphor bronze with solder Plated
5. Durability : 300 Mating cycles Min.

PCB Layout Mounting Hole (Top View)



Note:

1. Holes Type(a) P1-P8 Assign EtherNet
P9-P12 Assign LED
2. Holes Type(b) Assign Shield Cover
3. Holes Type(c) Fix Jack
4. Holes Tolerances $0.1 [0.004]$
5. Holes Pitch Tolerance $0.08 [0.003]$

SAMPLES TEST REPORT



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PART NO.		AM-017		DATE			2009/8/5				
DESCRIPTION		1 PORT RJ-45 JACK With 10/100 Base-T Magnetics Module									
ITEM	TEST EQUIPMENTS	TEST CONDITION @ 25°C	SAMPLES NO. TEST PIN	1	2	3	4	5	SPECIFICATION		
									Min	Typ	Max
OCL (uH MIN)	3250	100KHz/0.1V with 8mA DC BIAS	P1-P2	418	396	469	512	483	350		
			P7-P8	438	472	501	488	457			
HI-POT(Vrms)	GPI-5005T	1500Vrms	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1S		
L/L(uH MAX)	3250	100KHz/0.1V	P1-P2(shortJ1-J2)	0.31	0.29	0.28	0.30	0.27	0.4		
			P7-P8(shortJ3-J6)	0.28	0.27	0.29	0.31	0.30			
CW/W (PF MAX)	3250	100KHz/0.1V	P3-J4	22	23	25	19	18	28		
			P6-J8	24	23	21	20	19			
TURN RATIO (+/-3%)	CA8120A	1MHz/sine wave	P1-P2:J1-J2	PASS	PASS	PASS	PASS	PASS	1CT:1CT		
			P7-P8:J3-J6	PASS	PASS	PASS	PASS	PASS			
Insertion Loss (dB MAX)	8711/8712	0.3-100 MHz	P1-P2 TO J1-J2	-0.82	-0.86	-0.9	-0.84	-0.79	-1.15		
			P7-P8 TO J3-J6	-0.78	-0.83	-0.89	-0.84	-0.85			
Return Loss(dB MIN)	8711/8712	30 MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-16		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
		40 MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-14		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
		50 MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-13.5		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
		60 MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-13		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
		80MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-10		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
CMRR (dB TYP)	8711/8712	1-30MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-30		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
		30-60MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-25		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
		60-125MHz	P1-P2 TO J1-J2	PASS	PASS	PASS	PASS	PASS	-20		
			P7-P8 TO J3-J6	PASS	PASS	PASS	PASS	PASS			
Cross Talk (dB TYP)	8711/8712	0.3-30MHz	TX TO RX	PASS	PASS	PASS	PASS	PASS	-40		
		30-60MHz	TX TO RX	PASS	PASS	PASS	PASS	PASS	-35		
		60-100MHz	TX TO RX	PASS	PASS	PASS	PASS	PASS	-30		

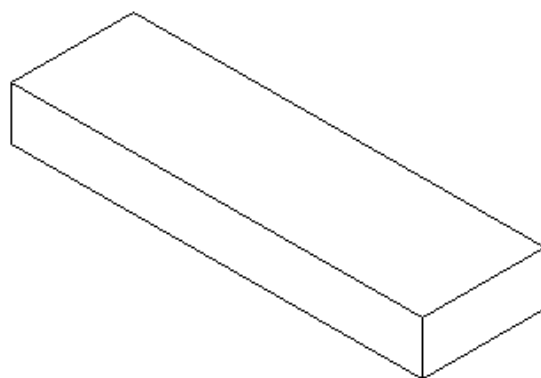
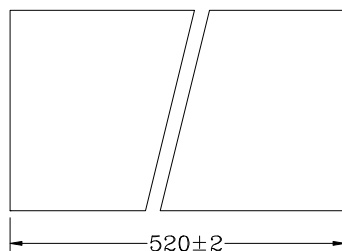
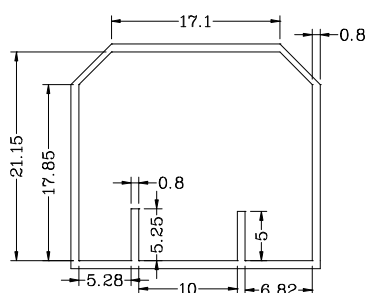


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SAMPLES PACK SPECIFICATIONS

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CUSTOMER	ACUWA	CUST P/N.	AM-017
ITEM	TRANSFORMER	DESCRIPTION	YL-1S049H
PART NO.	868-00810	DATE	2009/08/05

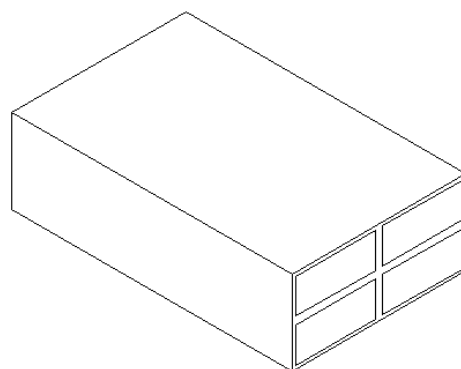
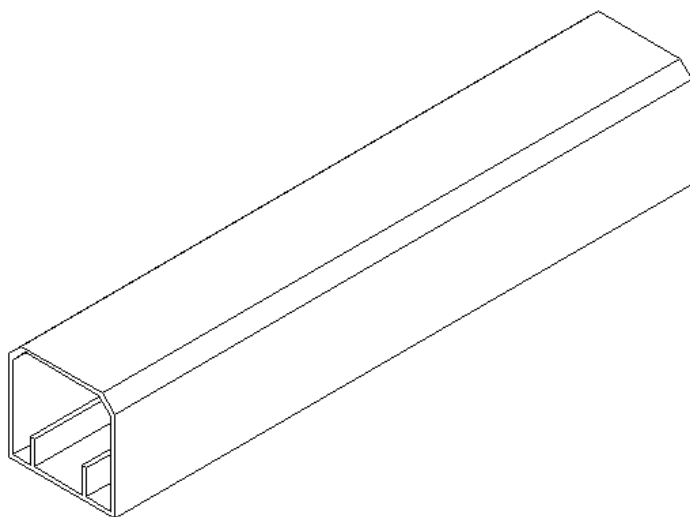


Units:mm Tolerances: xx.xx0±0.25

x.x0±0.25

TUBE MECHANICAL DIMENSION

INNER CARTON :540*160*70



TUBE =30 PCS

INNER CARTON=18 TUBE=18*30=540 PCS

EXPORT CAPTON : 560*340*160

EXPORT CARTON=4INNER CARON=4*540=2160 PCS

REMARK:	APPROVAL	CHECKED	DRAWN BY
	LiaoZongCheng		Qingxiaobin