



YONGCHENG

SPECIFICATION FOR APPROVAL

DATE: APR 12, 2009

SAMPLE Q'TY 5 PCS

CUSTOMER : ACUWA

CUSTOMER P/N: AM-002A

YONGCHENG P/N : YL-1S045GR

DESCRIPTION : 1 PORT RJ-45 JACK With 1000 Base-T Magnetics Module

APPROVED SIGNATURES	
YONGCHENG APPROVED SIGNATURES	CUSTOMER APPROVED SIGNATURES
APPROVED BY: LiaoZongCheng	APPROVED BY:
DATE: 2009/04/12	DATE:
APPROVED No. :	APPROVED No. :

(ZUNYI)YONGCHENG ENTERPRISE INC.

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1 PORT RJ-45 JACK WITH 1000BASE-T MAGNETICS MODULE

P/N: YL-1S045GR DATA SHEET(REFERENCE ACUWA AM-002A)



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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
- ◆ Operating temperature range : 0 to +70 .
- ◆ Storage temperature range: -45 to +85 .

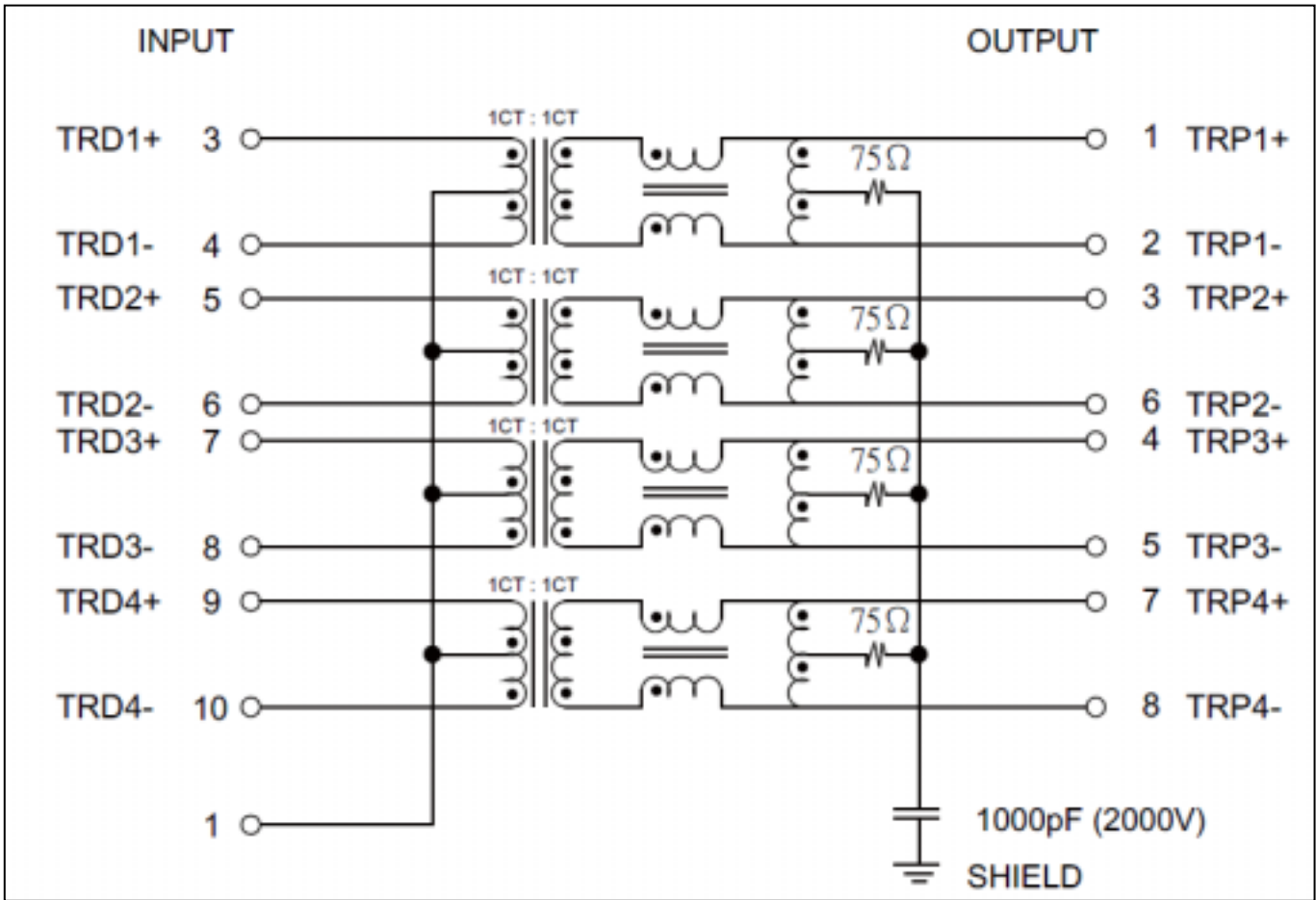
Electrical Specifications @ 25°C

Part Number	Turns Ratio (+/-5%)	CMRR (dB MIN)	HI-POT (Vrms)	OCL(uH Min) 100KHz/0.1V with 8Ma DC BIAS
		1-100MHz		
YL-1S045GR	1CT:1CT	-30	1500	350

Continue

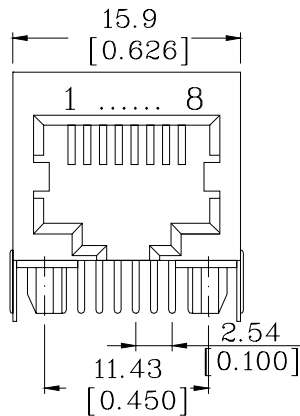
Part Number	Insertion Loss (dB Max)		Return Loss (dB MIN)				CROSS TALK (dB MIN)
	1-100MHz	100-125MHz	1-30MHz	30-40MHz	40-50MHz	50-80MHz	1-100MHz
YL-1S045GR	-1.0	-1.2	-16	-13.5	-11.5	-10	-30

Schematic

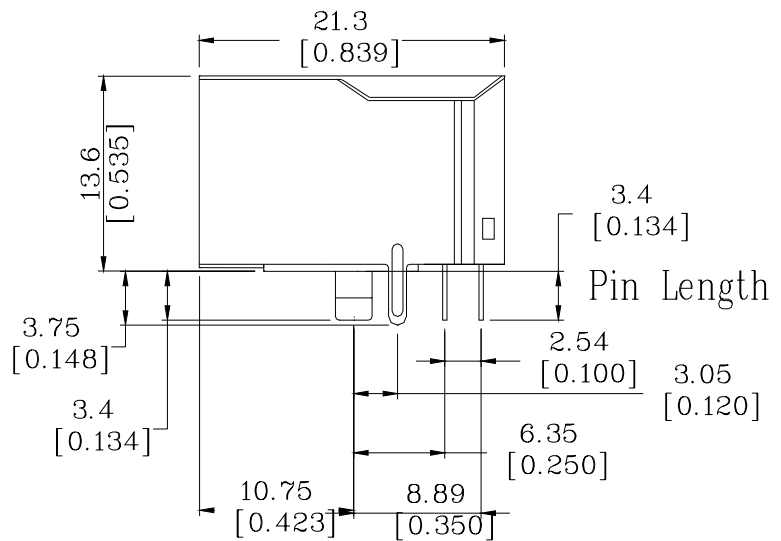




Mechanicals



Front View

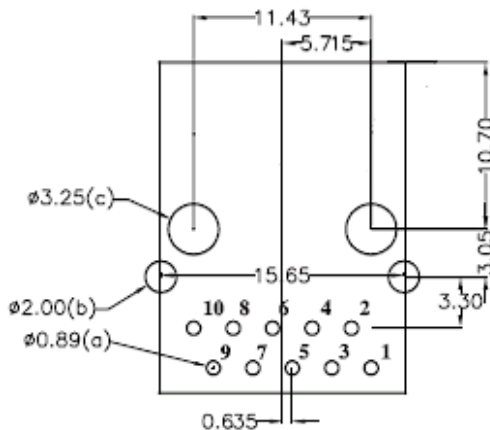


Side View

Dimensions: mm[Inches] Tolerances: ± 0.25 [0.01]

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)



TOP VIEW (COMPONENT SIDE)
RECOMMENDED P.C.B. LAYOUT

Note:

1. Holes Type(a) P1-P10 Assign EtherNet
2. Holes Type(b) Assign Shield Cover
3. Holes Type(c) Fix Jack.
4. Holes Tolerances $\begin{matrix} +0.1 \\ 0 \end{matrix}$ $\begin{matrix} +0.004" \\ 0.000" \end{matrix}$
5. Holes Pitch Tolerance ± 0.08 $\begin{matrix} \pm 0.003" \end{matrix}$

SAMPLES TEST REPORT



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PART NO.		AM-002A		DATE			2009/04/12					
DESCRIPTION		1 PORT RJ-45 JACK WITH 1000BASE-T MAGNETICS MODULE										
ITEM	TEST EQUIPMENTS	TEST CONDITION @ 25	SAMPLES NO. TEST PIN	1	2	3	4	5	SPECIFICATION			
									Min	Typ	Max	
OCL (uH MIN)	3250	100KHz/0.1V with 8mA DC BIAS	P5-P6	418	389	412	398	436	350			
			P3-P4	436	409	428	451	416				
			P7-P8	385	438	442	467	419				
			P9-P10	442	438	419	406	405				
Insertion Loss (dB MAX)	8711/8712	1-100 MHz	P3-P4 TO J1-J2	-0.86	-0.91	-0.81	-0.85	-0.78				
			P5-P6 TO J3-J6	-0.85	-0.85	-0.83	-0.88	-0.84				
			P7-P8 TO J4-J5	-0.82	-0.82	-0.86	-0.83	-0.76				
			P9-P10TO J7-J8	-0.78	-0.85	-0.93	-0.86	-0.89				
		100-125 MHz	P3-P4 TO J1-J2	-0.93	-0.97	-0.12	-0.96	-0.95				
			P5-P6 TO J3-J6	-1.03	-0.98	-0.92	-1.06	-0.01				
			P7-P8 TO J4-J5	-0.95	-0.93	-0.99	-1.06	-1.02				
			P9-P10TO J7-J8	-1.04	-0.98	-0.99	-1.08	-1.02				
HI-POT(Vrms)	GPI-5005T	1500Vrms	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1S			
TURN RATIO (+/-3%)	CA8120A	1MHz/sine save	P3-P4 : J1-J2	PASS	PASS	PASS	PASS	PASS	1CT:1			
			P5-P6 : J3-J6	PASS	PASS	PASS	PASS	PASS				
			P7-P8 : J4-J5	PASS	PASS	PASS	PASS	PASS				
			P9-P10:J7-J8	PASS	PASS	PASS	PASS	PASS				

Acuwa

PART NO.		AM-002A		DATE			2009/4/12				
DESCRIPTION		1 PORT RJ-45 JACK WITH 1000BASE-T MAGNETICS MODULE									
ITEM	TEST EQUIPMENTS	TEST CONDITION @ 25	SAMPLES NO. TEST PIN	1	2	3	4	5	SPECIFICATION		
									Min	Typ	Max
Return Loss(dB MIN)	8711/8712	1-30 MHz	P3-P4 TO J1-J2	-23.5	-25.1	-24.1	-25.2	-24.6	-16		
			P5-P6 TO J3-J6	-23.9	-23.9	-23.9	-23.8	-24.9			
			P7-P8 TO J4-J5	-25.5	-24.3	-24.7	-23.6	-23.9			
			P9-P10TO J7-J8	-24.5	-24.2	-25.3	-24.6	-23.7			
		30-40 MHz	P3-P4 TO J1-J2	-19.1	-18.9	-19.5	-20.3	-18.6	-13.5		
			P5-P6 TO J3-J6	-19.7	-19.6	-20.0	-195	-18.8			
			P7-P8 TO J4-J5	-20.1	-20.2	-19.2	-19.8	-18.4			
			P9-P10TO J7-J8	-19.3	-19.3	-19.5	-20.4	-20.0			
		40-50 MHz	P3-P4 TO J1-J2	-16.2	-16.2	-15.9	-16.8	-16.3	-11.5		
			P5-P6 TO J3-J6	-16.9	-16.1	-16.8	-16.9	-16.6			
			P7-P8 TO J4-J5	-16.1	-16.5	-16.7	-16.2	-15.9			
			P9-P10TO J7-J8	-16.3	-16.8	-15.8	-16.0	-15.5			
		50-80MHz	P3-P4 TO J1-J2	-15.1	-14.8	-15.3	-14.6	-13.9	-10		
			P5-P6 TO J3-J6	-14.5	-14.8	-15.2	-14.6	-14.7			
			P7-P8 TO J4-J5	-15.1	-15.5	-13.8	-14.6	-15.7			
			P9-P10TO J7-J8	-14.6	-15.2	-13.8	-13.9	-14.7			
CMRR (dB MIN)	8711/8712	1-100MHz	P3-P4 TO J1-J2	-48.6	-46.5	-48.3	-48.1	-48.2	-30		
			P5-P6 TO J3-J6	-47.8	-49.1	-49.6	-48.8	-48.6			
			P7-P8 TO J4-J5	--48.3	-46.5	47.9	-49.2	-47.7			
			P9-P10TO J7-J8	-47.1	48.2-	47.8	-48.3	-47.9			
Cross Talk (dB MIN)	8711/8712	1-100 MHz	P3-P4 ,J1-J2TO P5-P6 , J3-J6	-43.2	-42.9	-43.5	-42.1	-42.1	-30		
			P79-P10 ,J7-J8TO P7-P8 ,J4-J5	-40.8	-42.6	-42.2	-43.5	-41.7			

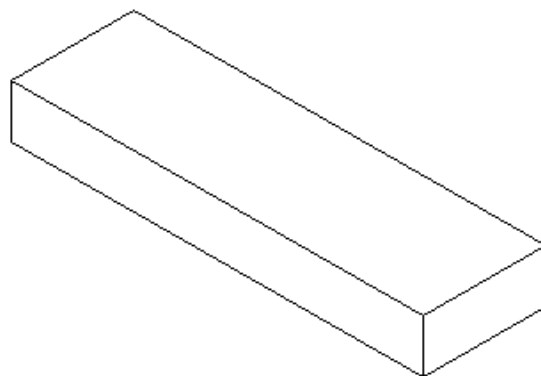
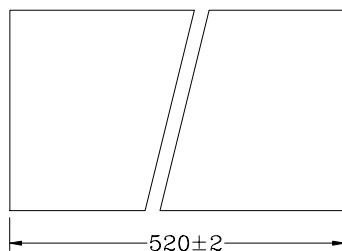
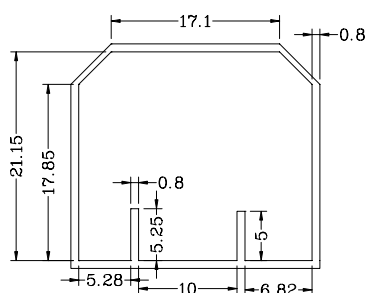


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SAMPLES PACK SPECIFICATIONS

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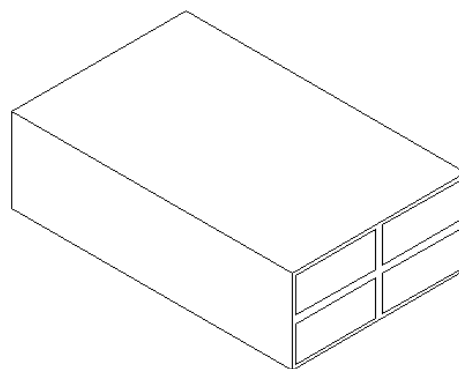
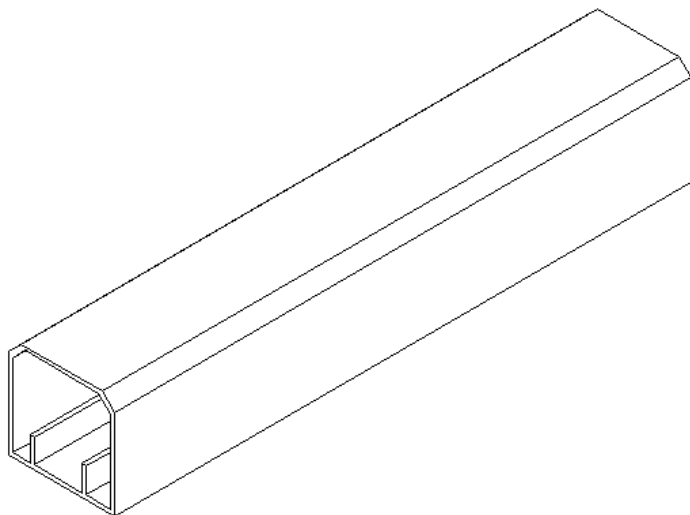
CUSTOMER	ACUWA	CUST P/N.	AM-002A
ITEM	TRANSFORMER	DESCRIPTION	YL-1S045GR
PART NO.	868-00420	DATE	2009/04/12



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