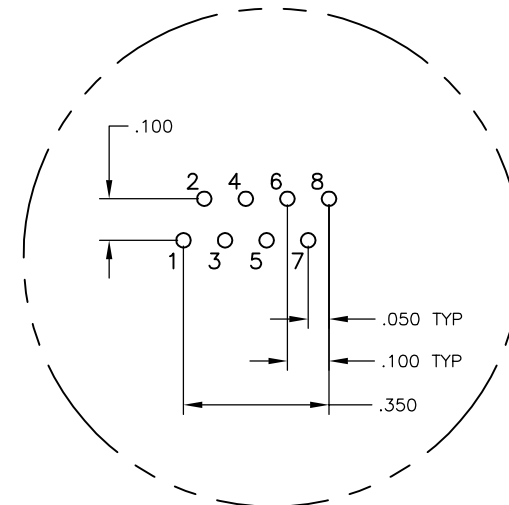
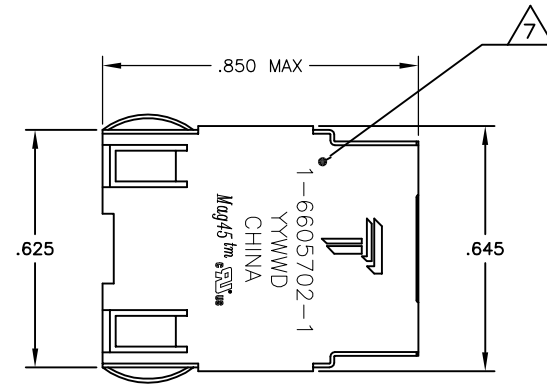


REVISIONS					
#	DATE	DESCRIPTION	BY	APP'D	REV
G	23APR2013	LOGO CHANGE	JC	KZ	

MECHANICAL:



Pin Designations

**MATERIALS:**  
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0. SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30μinch SEMI-BRIGHT NICKEL; SOLDER TABS POST-DIPPED WITH 100μinch MIN SAC SOLDER.  
 MOD JACK CONTACTS - .0157" x .018" THICK, PHOSPHOR BRONZE, 50μinch MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50μinch MIN HARD GOLD FINISH PLATE. SOLDERTAILS WITH 100μinch MIN MATTE TIN AND/OR SAC SOLDER DIP.  
 LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PREPLATED WITH 80μinch SILVER OVER 40μinch NICKEL UNDERPLATE OVER 40μinch COPPER UNDERPLATE; POST-PLATED WITH 100μinch MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.

**RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.**

**MAGNETICS:**  
 -APPLICATION: 10/100 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX  
 -PERFORMANCE @ 25°C:  
 INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 30MHz  
 18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz  
 12dB MIN FROM 60.1MHz TO 80MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
 33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz  
 -ISOLATION VOLTAGE:2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC.

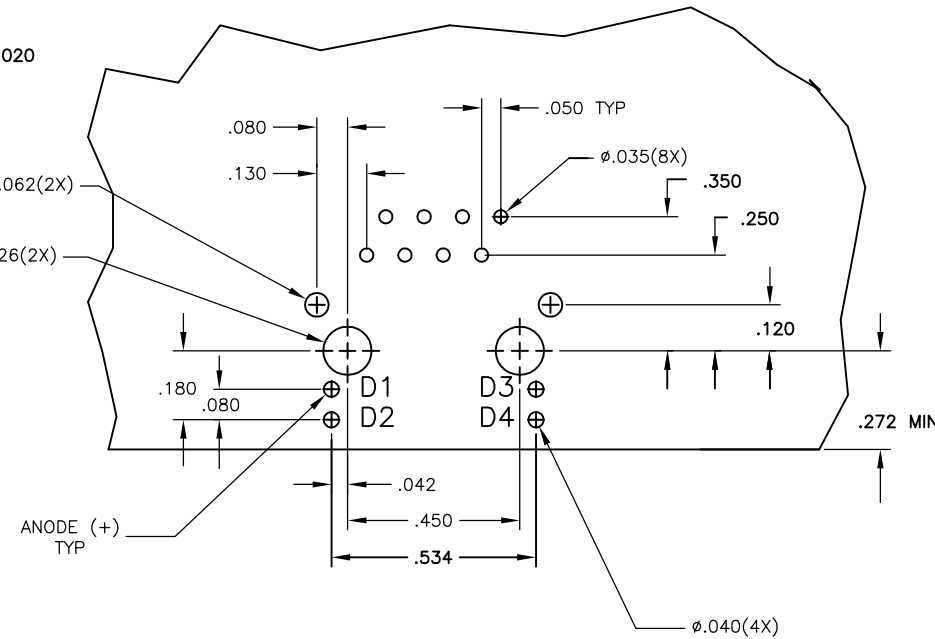
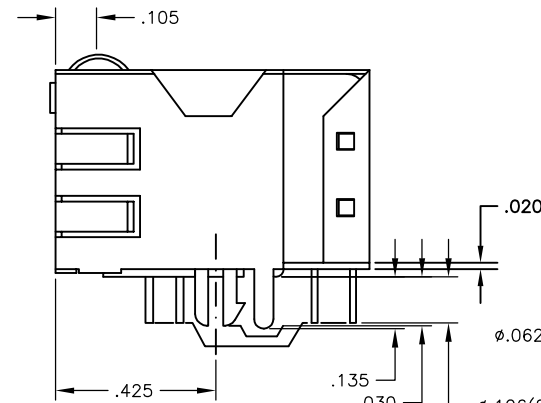
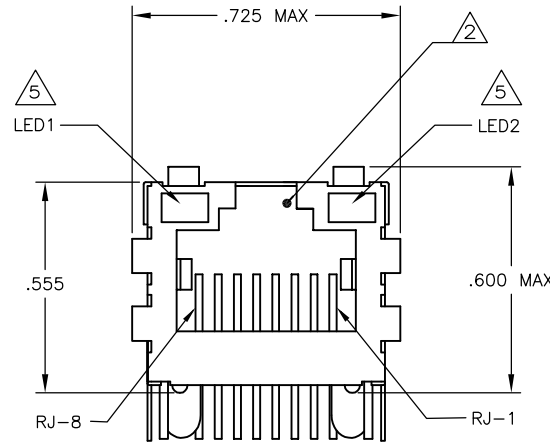
4. OPERATING TEMPERATURE: FROM 0°C - +70°C.

**THE 250 OHM LED RESISTORS ARE OPTIONAL, PLEASE SEE CHART FOR PRESENCE OR ABSENCE OF LED RESISTORS. IF THE LED WITHOUT 250 OHM RESISTORS, LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.**  
 LED COLOR: DOMINANT WAVELENGTH (AD): GREEN 568 nm TYP @ IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20mA  
 DOMINANT WAVELENGTH (AD): YELLOW 588 nm TYP @ IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20mA.  
**IF THE LED WITH 250 OHM RESISTORS,LED IS DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.**  
 LED COLOR: DOMINANT WAVELENGTH (AD): GREEN 568 nm TYP @ VF=5V  
 FORWARD CURRENT (IF): GREEN 12 mA TYP @ VF=5V  
 DOMINANT WAVELENGTH (AD): YELLOW 588 nm TYP @ VF=5V  
 FORWARD CURRENT (IF): YELLOW 13 mA TYP @ VF=5V

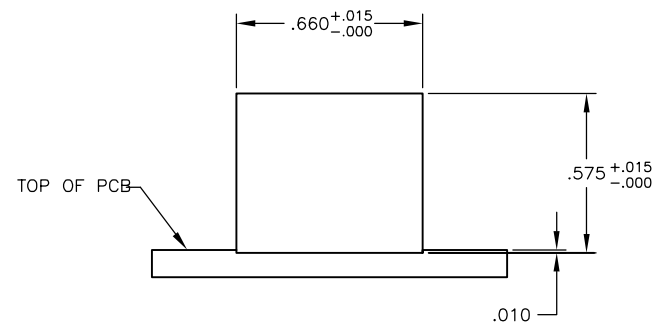
**INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND THEREFORE DOES SUPPORT AUTO-MDI/MDIX.**

**TRP CONNECTOR LOGO,TE CONNECTIVITY PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.**

8. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK SOLDERING TEMPERATURE IS 260 °C MAX, 10 SECONDS MAX.

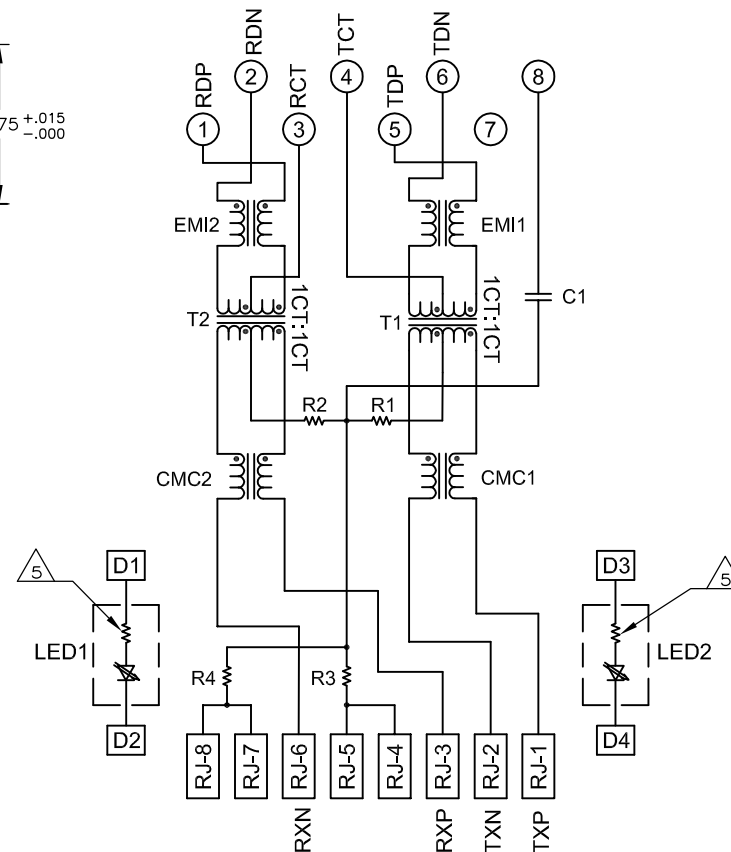


Suggested PCB Layout  
 (Component Side)

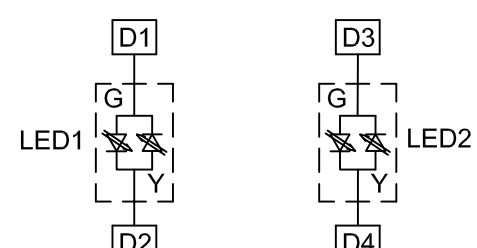


Suggested Panel Cutout

706 10/100 BASE-T CIRCUIT



C1=1000pF, 2kV CAPACITOR  
 R1-R4 = 75 OHMS, 1/16 W RESISTORS



LED CONFIGURATION  
 FOR BI-COLOR

.145±.010	YES	GREEN	YES	GREEN	YES	6-6605702-1
.145±.010	YES	GREEN	NO	GREEN	NO	5-6605702-7
.145±.010	YES	GREEN/YELLOW	NO	GREEN/YELLOW	NO	5-6605702-6
.145±.010	YES	GREEN	YES	YELLOW	YES	5-6605702-1
.100±.010	YES	GREEN/YELLOW	NO	GREEN/YELLOW	NO	2-6605702-6
.145±.010	NO	GREEN	YES	GREEN	YES	1-6605702-1
DIMENSION A	DECOUPLING CAPACITOR	LED1	250 OHMS RESISTOR	LED2	250 OHMS RESISTOR	PART NUMBER

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		MATERIAL:		FINISH:	
INCHES		0 PLG	± .010	0 PLG	± .010	0 PLG	± .010
		1 PLG	± .010	1 PLG	± .010	1 PLG	± .010
		2 PLG	± .010	2 PLG	± .010	2 PLG	± .010
		3 PLG	± .010	3 PLG	± .010	3 PLG	± .010
		4 PLG	± .010	4 PLG	± .010	4 PLG	± .010
		ANGLES	± .010	ANGLES	± .010	ANGLES	± .010

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRAWN BY: R.GRZYBOWSKI		TRP connector	
DIMENSIONS: INCHES		CHECKED BY: D.FAROLE		Dongguan China	
MATERIAL: A1		PRODUCT SPEC: 108-2100		NAME: 1X1 MAG45(TM), MODULAR JACK, 7N7 SCHEMATIC, 706 SERIES CIRCUIT, SHIELDED, OPTIONAL DECOUPLING CAPACITOR, WITH LEDS	
CUSTOMER DRAWING		SCALE: NTS		SHEET 1 OF 1	