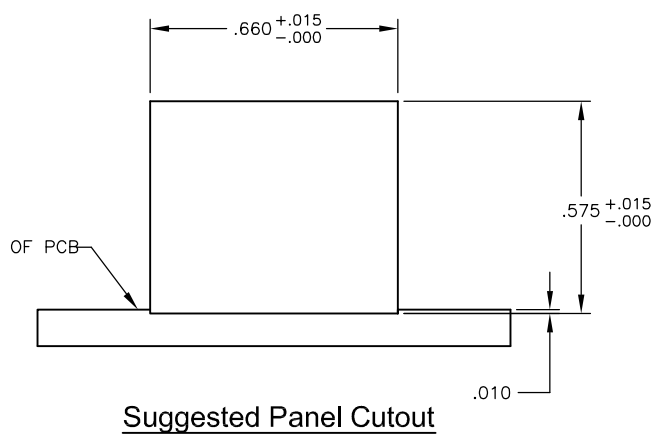
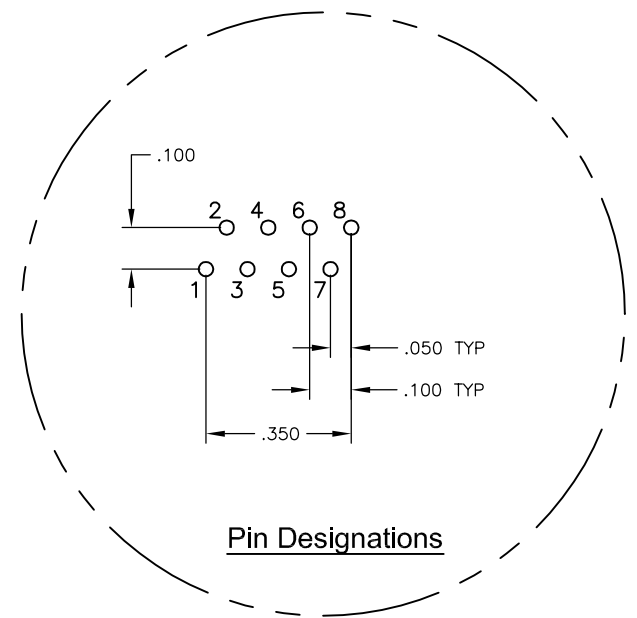
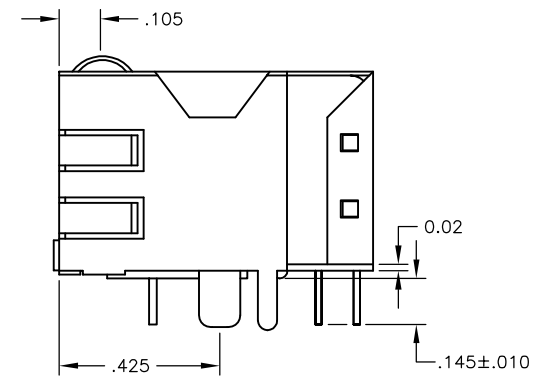
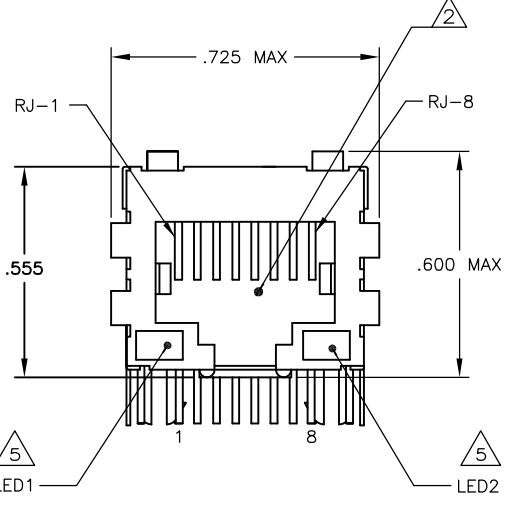
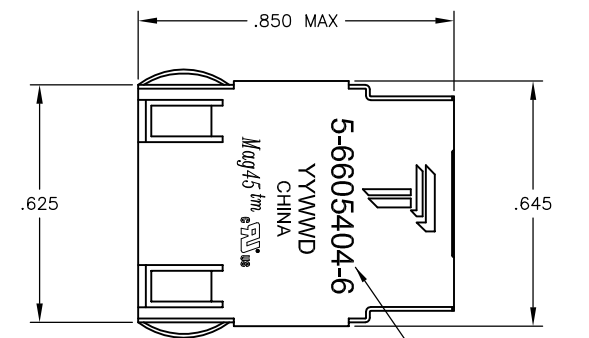
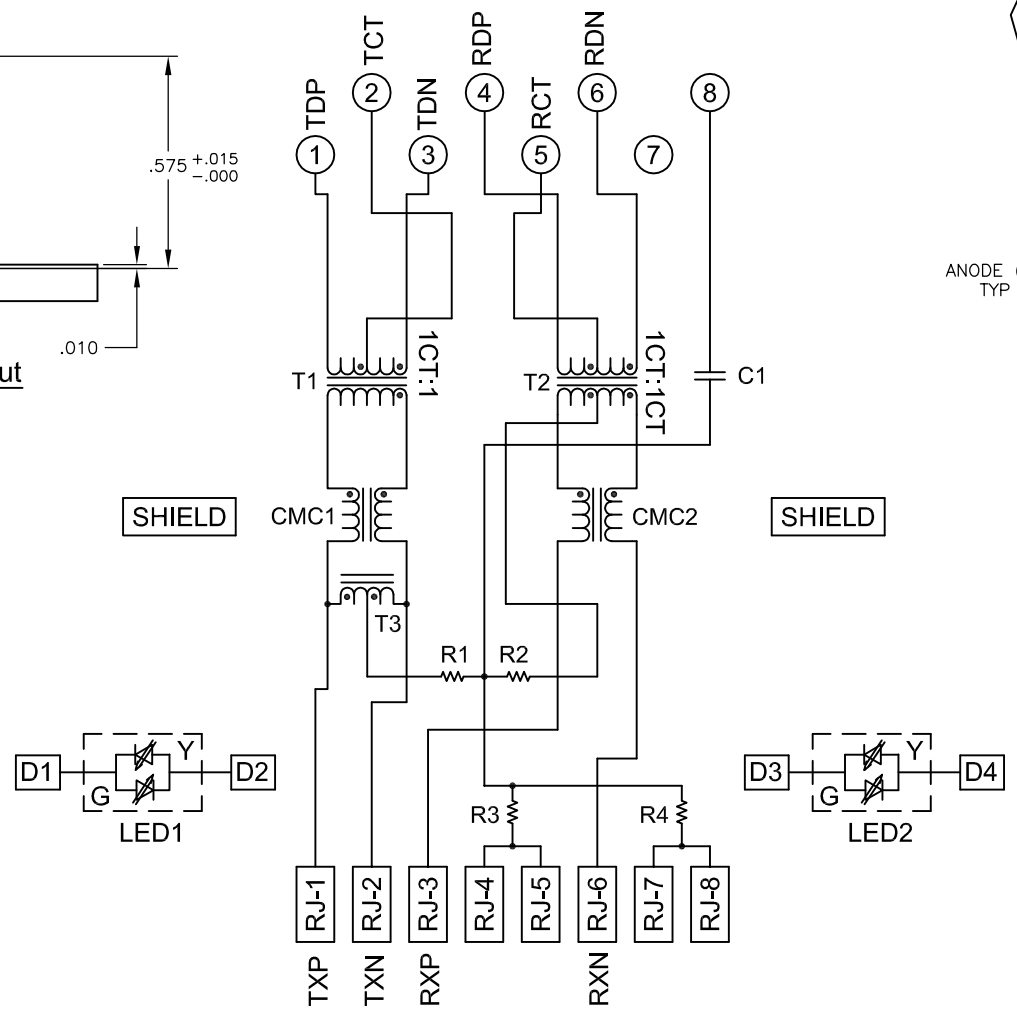


REVISIONS					
#	LN	DESCRIPTION	DATE	BY	APP
D		LOGO CHANGE	23APR2013	JC	KZ

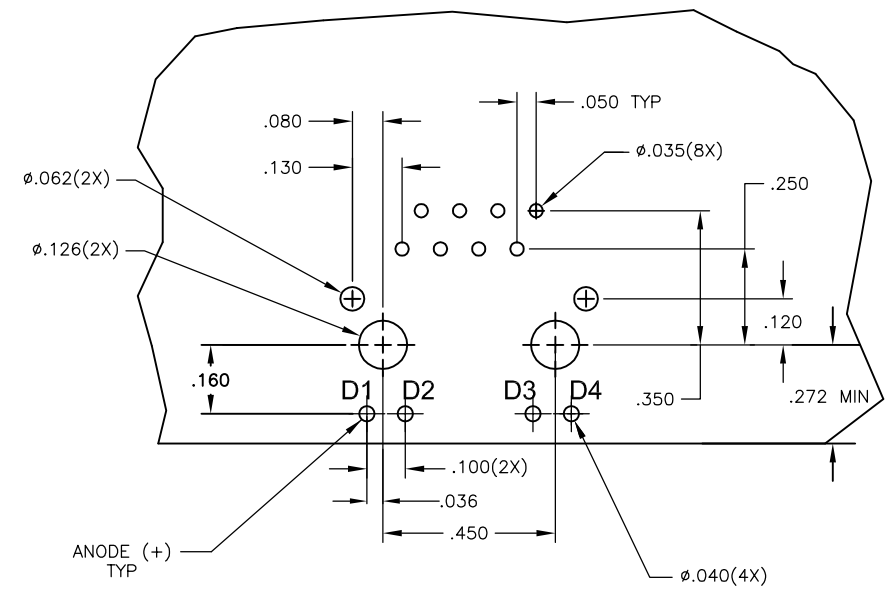
MECHANICAL:



ELECTRICAL:
414ETP1 SERIES MAGNETIC CIRCUIT



C1 = 1000 pF, 2kV DECOUPLING CAPACITOR
R1-R4 = 75 OHMS, 1/16 W, 5% RESISTORS



Suggested PCB Layout
(Component Side)

- ⚠️ **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 - 0.0157 X 0.018" PHOSPHOR BRONZE, 50μINCH MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50μINCH MIN HARD GOLD FINISH PLATE SOLDER TAILS WITH 100μINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.
LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PRE-PLATED 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**
-IMPEDANCE: 100 OHMS
-TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
-OPEN CIRCUIT INDUCTANCE (OCL): 350μH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM -40°C TO +85°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
33-20*LOG(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 -40°C TO +85°C INDUSTRIAL TEMPERATURE RATED.**
- ⚠️ **LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20 mA**
LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP @ IF=20 mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20 mA
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP @ IF=20 mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20 mA
- ⚠️ **INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRIC, AND THEREFORE DO NOT SUPPORT AUTO-MDI/MDIX.**
- ⚠️ **TRP CONNECTOR LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.**
- 8. **THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.**

GREEN/YELLOW	GREEN/YELLOW	5-6605404-6
LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRN: G. ATTADIA - 07MAR2005	TRP connector	
DIMENSIONS: INCHES		CHK: D. FAROLE - 07MAR2005	Dongguan China	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APP: D. FAROLE - 07MAR2005	TRP connector logo	
0 PLC	± -	PRODUCT SPEC	NAME: 1X1 MAG45(TM), MODULAR JACK, 4N2ETP1 INDUSTRIAL TEMP SCHEMATIC, 414ETP1 MAGNETIC CIRCUIT, SHIELDED, WITH BICOLOR LEADS	
1 PLC	± .010	APPLICATION SPEC	SIZE: A1	
2 PLC	± .005	RESTRICTED TO	C=6605404	
3 PLC	± .002		SCALE: NTS	
4 PLC	± .001		SHEET 1 OF 1	
ANGLES	± .001		REV D	
FINISH	± .001			
MATERIAL		CUSTOMER DRAWING		