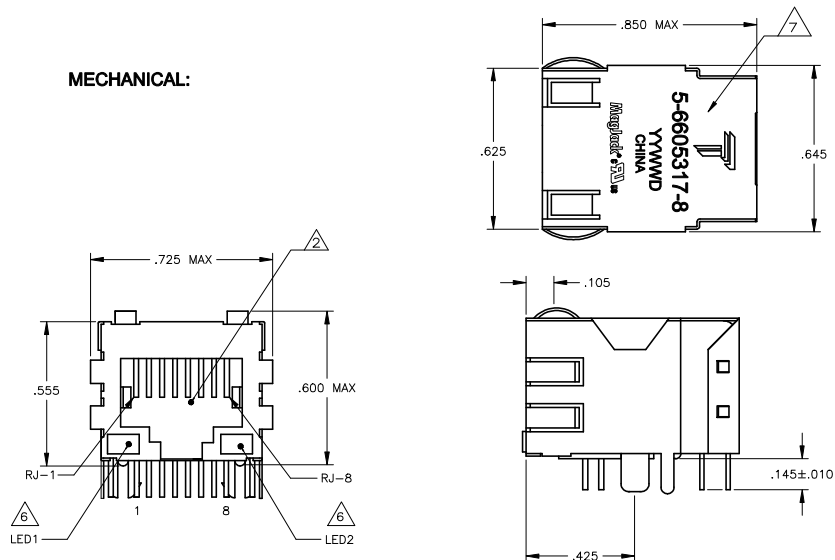


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PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
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7429195 7717749 7808751 6217391 6149050 7924130

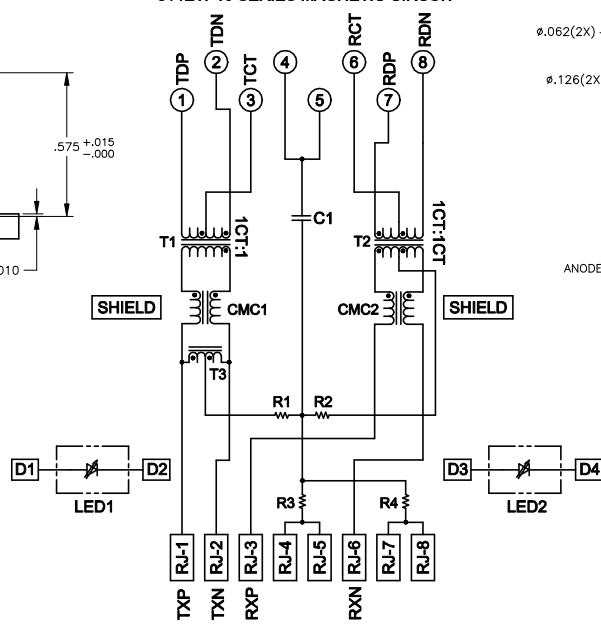
REVISIONS				
REV	DESCRIPTION	DATE	BY	APP
E	EC-1411035 COMPANY LOGO CHANGE	2/26/2014	ST	LT

## MECHANICAL:



## ELECTRICAL:

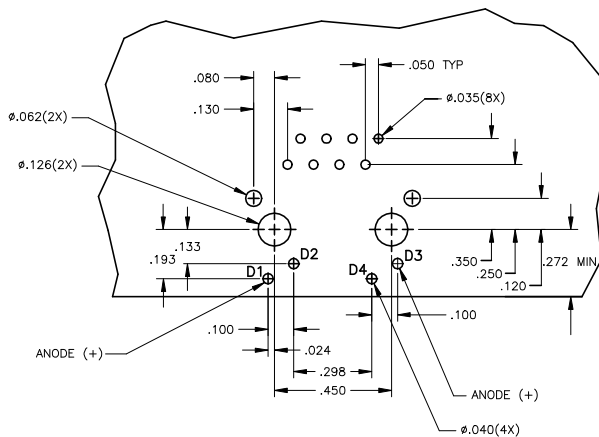
### 314ETP10 SERIES MAGNETIC CIRCUIT



C1=1000 pF, 2KV DECOUPLING CAPACITOR

R1-R4 = 75 OHMS, 1/16 W RESISTORS

## Pin Designations



## Suggested PCB Layout (Component Side)

## 1. 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): 11dB 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° TO +85°C INDUSTRIAL TEMPERATURE RATED.

△ INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE ASYMMETRIC, AND ARE NOT AUTO-MDIX/MDIX CAPABLE.

## △ LEDS WITHOUT BUILT-IN RESISTOR

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  
DOMINANT WAVELENGTH (λD): ORANGE 605 nm TYP @ IF=20 mA  
FORWARD VOLTAGE (VF): ORANGE 2.1V TYP @ IF=20 mA

△ 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	5-6605317-8
LED1	LED2	PART NUMBER



THIS DRAWING IS A CONTROLLED DOCUMENT.		REV. 1		DATE	
DIMENSIONS: INCHES		DIMENSIONS: MILLIMETERS		DIMENSIONS: MILLIMETERS	
1.000		25.400		25.400	
0.005		0.127		0.127	
0.010		0.254		0.254	
0.020		0.508		0.508	
0.050		1.270		1.270	
0.100		2.540		2.540	
0.200		5.080		5.080	
0.500		12.700		12.700	
1.000		25.400		25.400	
2.000		50.800		50.800	
5.000		127.000		127.000	
10.000		254.000		254.000	
20.000		508.000		508.000	
50.000		1270.000		1270.000	
100.000		2540.000		2540.000	
250.000		6350.000		6350.000	
500.000		12700.000		12700.000	
1000.000		25400.000		25400.000	
2500.000		63500.000		63500.000	
5000.000		127000.000		127000.000	
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