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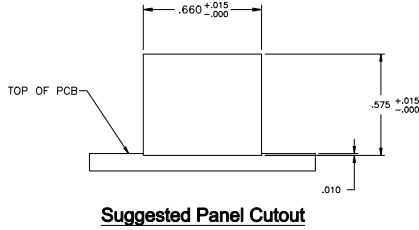
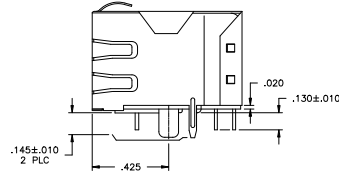
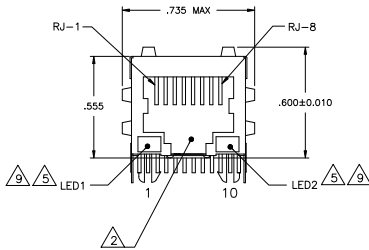
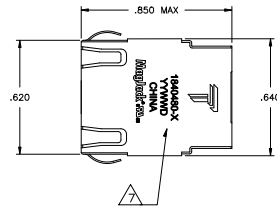
For any questions, you can email us directly:  
[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

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PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
 6736910-6939956-6426781-6428361-6584638-6840817-7123117  
 7429195-7717749-7808751-6217391-6149050-7924130

REVISIONS		DATE	BY	APP
1	ISSUE			
2	EC-1411035 COMPANY LOGO CHANGE	14JUN2016	TL	KZ

MECHANICAL:



**MATERIALS:**  
 HOUSING - THERMOPLASTIC PA46 TE250F6 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 50µINCH SILVER OVER 4µINCH NICKEL UNDERPLATE OVER 4µINCH 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: 10/100/1000 BASE-T  
 -IMPEDANCE: 100 OHMS  
 -TURNS RATIO (CHIP-CABLE): 1:1 ALL FOUR PAIRS  
 -OPEN CIRCUIT INDUCTANCE (OCL): 350nH MIN @100MHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS  
 -ALL FOUR PAIRS BI-DIRECTIONAL  
**PERFORMANCE @ 25°C:**  
 INSERTION LOSS (IL): 1dB MAX FROM 0.5MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz  
 12-20LOG(f/80)dB MIN FROM 4.0MHz TO 100MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz  
 33-20LOG(f/50)dB MIN FROM 4.0MHz 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 TO +70°C.**

**LEDS WITHOUT BUILT-IN RESISTOR**  
 LEADS 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 MAGNETIC CONNECTIONS ARE SYMMETRICAL TO SUPPORT AUTO-MDI/MDIX.**

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

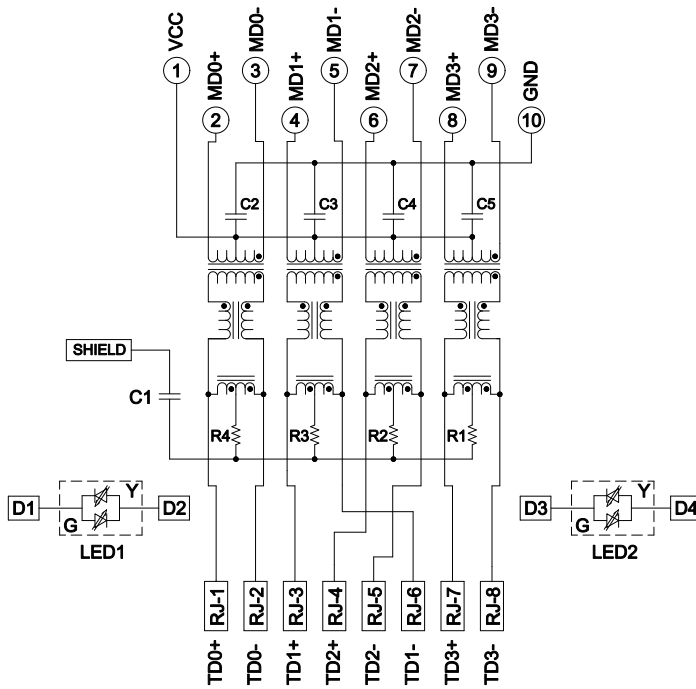
**THE PART IS COMPLIANT TO BOTH WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 150°C ABOVE, 120 SECONDS TO 180 SECONDS, PEAK SOLDERING TEMPERATURE IS 265 °C MAX, 10 SECONDS MAX; AND IR REFLOW SOLDERING PROCESS, PEAK SOLDERING TEMPERATURE 260°C MAX DURATION TIME 10 SECONDS MAX, OVER 230 °C WITHIN 40 SECONDS TO 60 SECONDS.**

**LED LENS ARE RECESSED TO SHIELD SURFACE**

THIS DRAWING IS A CONTROLLED DOCUMENT.		REVISED	DATE	BY	APP
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**ELECTRICAL:**

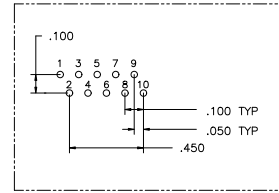
**4G05P1 Series GIGABIT Magnetic Circuit**



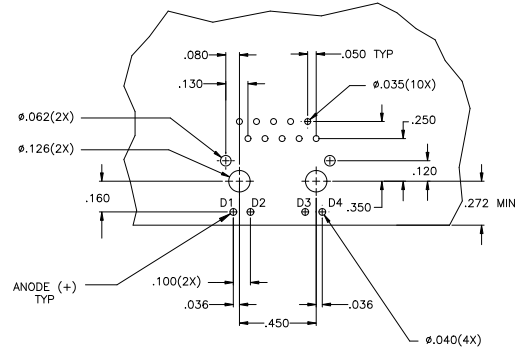
**C1 = 1000 pF, 2kV CAPACITOR**

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

**C2-C5 = 0.1uF, 50V, X7R CAPACITORS**



**Pin Designations**



**Suggested PCB Layout  
(Component Side)**

THIS DRAWING IS A CONTROLLED DOCUMENT.		DESIGNED BY: JIN LEE	PROCESSED BY: JIN LEE		DONGGUAN CHINA
DATE: 10/10/2014	REV: 0	DESIGNED BY: JIN LEE	PROCESSED BY: JIN LEE		
PROJECT NO: 108-104004	DESCRIPTION: MAGJACK	DATE: 10/10/2014	REV: 0	1X1 4G05P1 GIGABIT TAB DOWN W/ LED	
				SINGLE NON-POE	
				A1 ©=1840480	
				CUSTOMER DRAWING	
				SCALE: 1:1 SHEET: 2 OF 2	