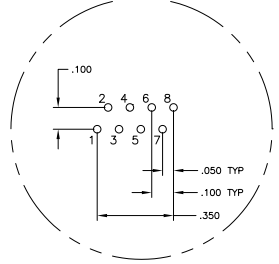
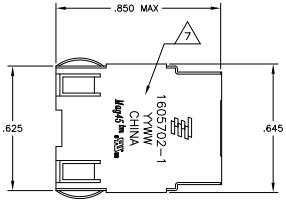
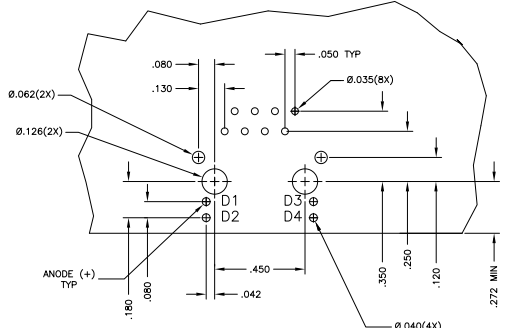
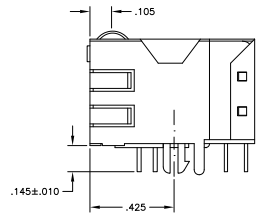
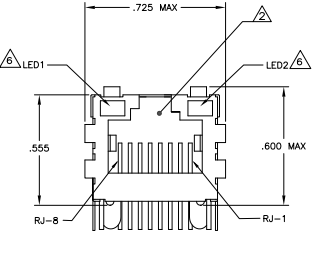


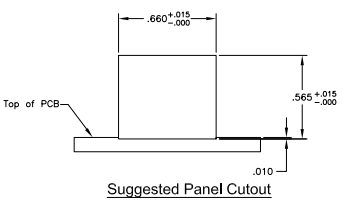
MECHANICAL:



Pin Designations

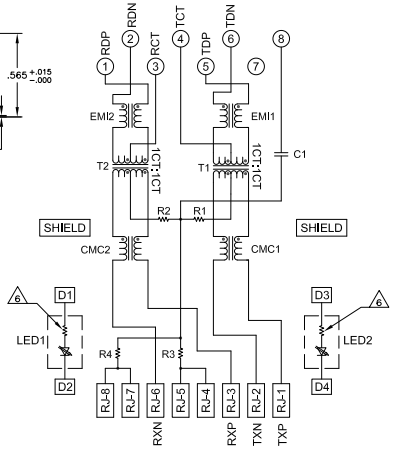


Suggested PCB Layout (Component Side)

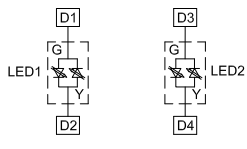


Suggested Panel Cutout

706 SERIES MAGNETIC CIRCUIT



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



LED CONFIGURATION FOR 5-1605702-6 ONLY

MATERIALS:
 HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0, SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 80-150µINCH SEMI-BRIGHT NICKEL, POST-DIPPED WITH 100µINCH MIN TIN-LEAD.
 MOD JACK CONTACTS - .0157" x .018" THICK, PHOSPHOR BRONZE, 50µINCH MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50µINCH MIN HARD GOLD FINISH PLATE. SOLDER TAILS WITH 50µINCH MIN TIN-LEAD FINISH PLATE.
 LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PREPLATED WITH 90µINCH SILVER OVER 40µINCH NICKEL UNDERPLATE OVER 80µINCH COPPER UNDERPLATE, POST-PLATED WITH 300µINCH THICK TIN-LEAD.

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

MAGNETICS:
 -IMPEDANCE: 100 OHMS
 -TRANSMIT OPEN CIRCUIT INDUCTANCE (OCL): 350µH (MIN) @100KHZ, 0.1VRMS WITH 8 mA DC BIAS
 -RISE TIME: 2.5 NANO-SECONDS FROM 10 TO 90 PERCENT.
 -TURNS RATIO (ICHP: CABLE): TX: 1:1, RX: 1:1
PERFORMANCE:
 -TRANSMIT RJ1 & 2
 -RECEIVE RJ3 & 6.

FREQUENCY	INSERTION LOSS	RETURN LOSS	CROSSTALK ATTENUATION	COMMON MODE REJECTION RATIO	
			TX	RX	
100 MHz-999 MHz	1.0 dB(MAX)	18.0 dB(MIN)	43.0 dB(MIN)	46.0 dB(MIN)	35.0 dB(MIN)
1.0 MHz-15.0 MHz	0.3 dB(MAX)	18.0 dB(MIN)	43.0 dB(MIN)	46.0 dB(MIN)	35.0 dB(MIN)
15.1 MHz-60.0 MHz	0.6 dB(MAX)	18.0 dB(MIN)	43.0 dB(MIN)	46.0 dB(MIN)	35.0 dB(MIN)
60.1 MHz-80.0 MHz	1.1 dB(MAX)	15.0 dB(MIN)	38.0 dB(MIN)	42.0 dB(MIN)	33.0 dB(MIN)
80.1 MHz-100.0 MHz	1.1 dB(MAX)	12.0 dB(MIN)	36.0 dB(MIN)	42.0 dB(MIN)	33.0 dB(MIN)

HIPOT (ISOLATION VOLTAGE):
 -1500 VRMS (0.5 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION WITHOUT DECOUPLING CAPACITOR.
 -2250 VDC (1 mA CUTOFF CURRENT) FOR 60 SECONDS DURATION WITH DECOUPLING CAPACITOR.
 -ALL BRIDGED ON EITHER SIDE OF MAGNETICS PACKAGE FOR RJ-45 CONTACTS. OPERATING TEMPERATURE: FROM 0° - +70°C.

ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.
INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND THEREFORE DOES SUPPORT AUTO-HOT/PODK.

THE 250 OHM RESISTOR IS OPTIONAL, PLEASE SEE CHART FOR PRESENCE OR ABSENCE OF LED RESISTORS.
 IF LEDS WITHOUT 250 OHM 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
 IF LEDS WITH BUILT-IN RESISTOR, LEDS ARE DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP @ VF=5V
 FORWARD CURRENT (IF): GREEN 12mA TYP @ VF=5V
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP @ VF=5V
 FORWARD CURRENT (IF): YELLOW 13mA TYP @ VF=5V

TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK WAVE SOLDERING TEMPERATURE IS 265°C MAX, 10 SEC MAX.

OBsolete PARTS: OBSOLETE CIS STREAMLINING PER D.RENAUD/D.SINISI

YES	YES	GREEN	GREEN	6-1605702-1
NO	YES	GREEN	GREEN	5-1605702-7
NO	YES	GREEN/YELLOW	GREEN/YELLOW	5-1605702-6
YES	YES	GREEN	YELLOW	5-1605702-1
NO	NO	GREEN	GREEN	4-1605702-1

REV	DATE	DESCRIPTION	BY	CHK	APP
AA	22				

THIS DRAWING IS A CONTROLLED DOCUMENT. UNLESS INDICATED OTHERWISE, THIS DRAWING IS UNCLASSIFIED.

1X1 MAG45(TM), MODULAR JACK, 7N7 SCHEMATIC, 706 SERIES CIRCUIT, SHIELDED, OPTIONAL DECOUPLING CAPACITOR, WITH LEDS

DATE: 10/07/09
 PART NUMBER: 1605702