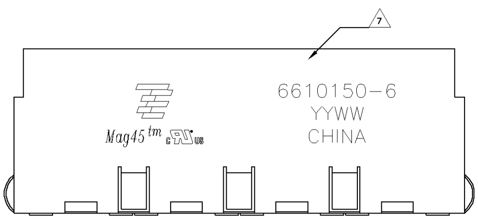
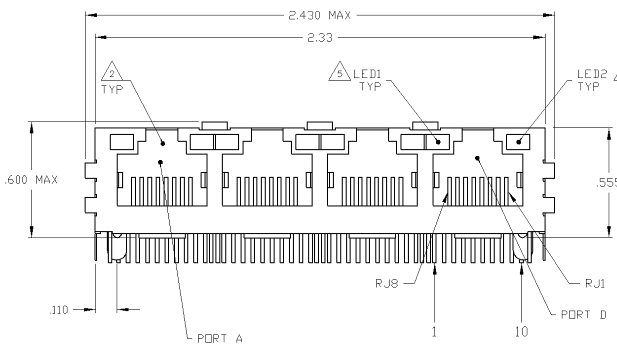
LOC	DIST
AA	22

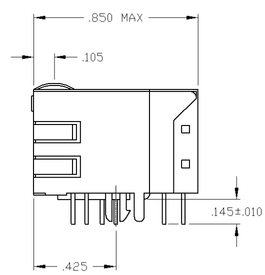
REVISIONS

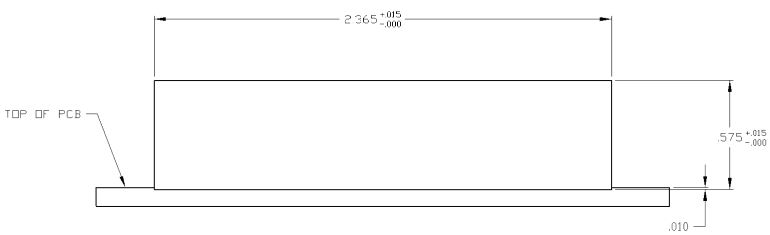
P	LTR	DESCRIPTION	DATE	DWN	APVD
	B	REV PER ECO-08-012985	12APR2008	DC	TX

MECHANICAL:









1X4 SUGGESTED PANEL CUTOUT

1. MATERIALS:
   - HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
   - SHIELD - 0.010" THICK, C26800 BRASS PREPLATED WITH 30µINCH MIN 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. SOLDERTAILS WITH 100µINCH MIN MATTE TIN AND/OR SAC SOLDER DIP.
   - LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, 0.020" X 0.020" CARBON STEEL WIREFRAME LEADS PRE-PLATED WITH 80µINCH SILVER OVER 40µINCH NICKEL UNDERPLATE OVER 40µINCH COPPER UNDERPLATE. POST-PLATED WITH 100µIN MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP.
2. RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.
3. MAGNETICS
   - IMPEDANCE: 100 OHMS
   - TURNS RATIO (CHIP: CABLE): 1:1 ALL FOUR PAIRS
   - OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, ALL FOUR PAIRS
   - ALL FOUR PAIRS BI-DIRECTIONAL
   - PERFORMANCE @ 25°C:
     - INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
     - RETURN LOSS (RL): 18dB MIN FROM 0.5MHZ TO 40MHz
       12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz
     - 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: COMPLIES WITH IEEE802.3 2002, PARA 40.6.1.1, ITEM b.
4. OPERATING TEMPERATURE: FROM 0°C TO +70°C.
5. THE LED WITH 250 OHM RESISTORS,LED IS DRIVEN WITH 5V VOLTAGE AND THE MAX OPERATING CURRENT IS 20mA.
   LED COLOR : DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. AT VF=5V
   FORWARD CURRENT (IF): GREEN 12 mA TYP. AT VF=5V
   DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. AT VF=5V
   FORWARD CURRENT (IF): YELLOW 13 mA TYP. AT VF=5V
6. INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX
7. TYCO ELECTRONICS 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,PEAK WAVE SOLDERING TEMPERATURE IS 265°C MAX,10 SECONDS MAX.

GREEN/YELLOW	GREEN/YELLOW	6610150-6
LED1 5	LED2 5	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DWN	G. ATTADIA - DOCK5, 15MAR2005
CHK	D. FAROLE, 15MAR2005
APVD	D. FAROLE, 15MAR2005
PRODUCT SPEC	108-2100
APPLICATION SPEC	–
WEIGHT	–
DIMENSIONS	INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED	0 PLC ± –; 1 PLC ± –; 2 PLC ± .010; 3 PLC ± .005; 4 PLC ± –; ANGLES ± –
MATERIAL	1
FINISH	1

Tyco Electronics Corporation
Harrisburg, PA 17105-3608

NAME: 1X4 MAG45(TM) MODULAR JACK, 7G2 SCHEMATIC, (10 PIN HORIZONTAL), 7G07 SERIES GIABIT CIRCUIT, SHIELDED, WITH BI-COLOR LEDS

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-6610150	–

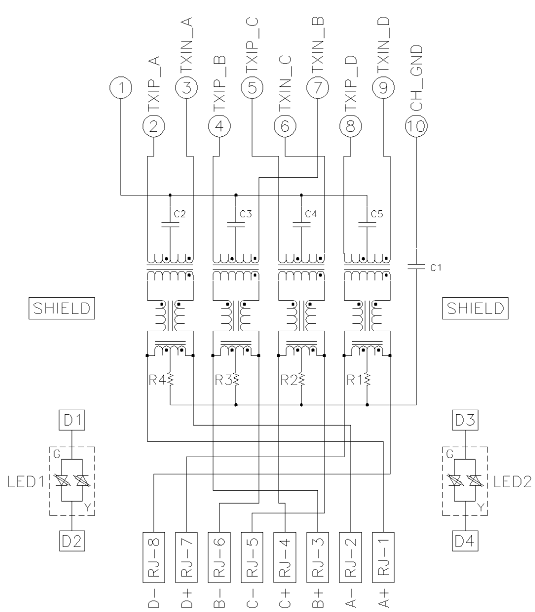
CUSTOMER DRAWING — SCALE 4:1 — SHEET 1 OF 2 — REV B

LOC	DIST
AA	22

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	–	SEE SHEET 1	–	–	–

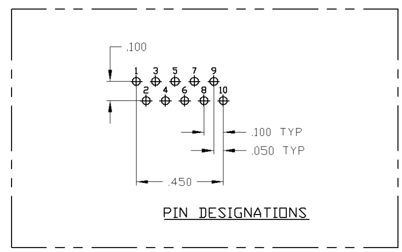
7G07 SERIES GIGABIT CIRCUIT 3 6

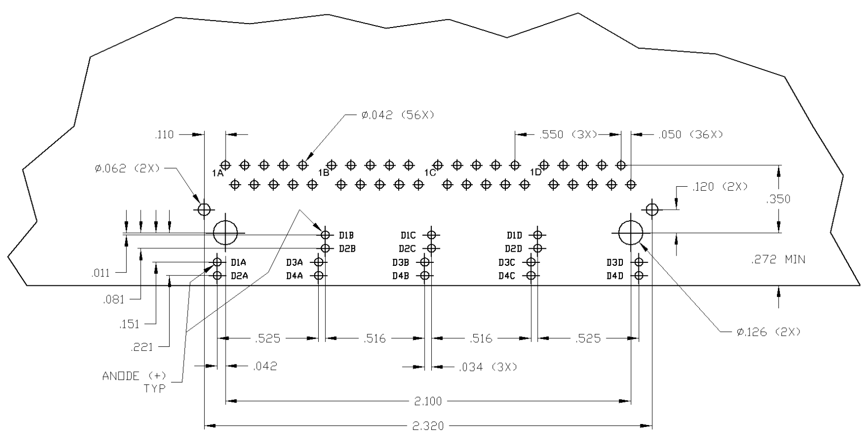


C1 = 1000pF, 2kV CAPACITOR

R1–R4 = 75 OHMS, 1/16W RESISTORS

C2–C5 = 0.1µF, 50V CAPACITORS





SUGGESTED PCB LAYOUT
(Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT.	DWN G. ATTADIA – DOCK5 15MAR2005	Tyco Electronics	Tyco Electronics Corporation Harrisburg, PA 17105-3608
DIMENSIONS: INCHES	CHK D. FAROLE 15MAR2005	NAME 1X4 MAG45(TM) MODULAR JACK, 7G2 SCHEMATIC, (10 PIN HORIZONTAL), 7G07 SERIES GIGABIT CIRCUIT, SHIELDED, WITH BI-COLOR LEDS	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± – 1 PLC ± – 2 PLC ± .010 3 PLC ± .005 4 PLC ± – ANGLES ± –	APVD D. FAROLE 15MAR2005		
	PRODUCT SPEC 108-2100	SIZE A1	CAGE CODE 00779
	APPLICATION SPEC –	DRAWING NO C-6610150	RESTRICTED TO –
MATERIAL – FINISH –	WEIGHT –	SCALE 4:1	SHEET 2 OF 2 REV B
	CUSTOMER DRAWING		

AMP 4805 REV 31MAR2000