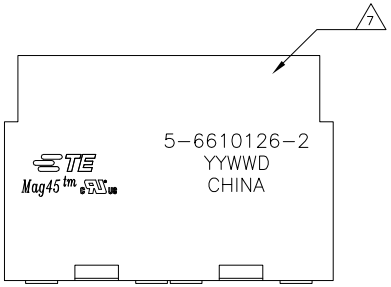
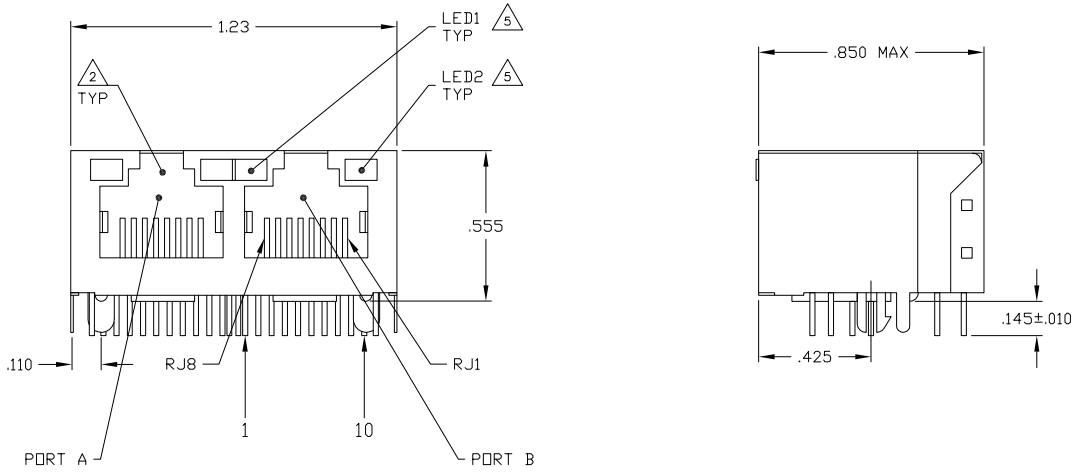
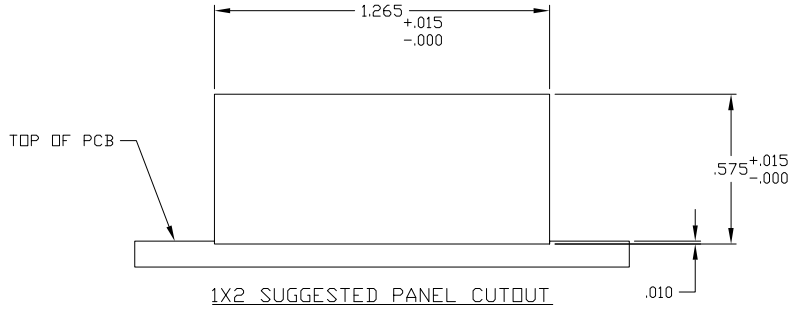
LOC	DIST
AA	22

P	LTR	DESCRIPTION	DATE	DWN	APVD
	B	REV PER ECO-08-012990	14APR2008	DC	TX
	C	ECO-11-013359	20MAY2011	EL	LR

MECHANICAL:







1X2 SUGGESTED PANEL CUTOUT

1. MATERIALS:
-HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
-SHIELD - .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, .020" X .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): 350mH 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: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC AND WITH ALL PORTS CONNECTED.

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 568nm TYP. @ VF=5V
FORWARD CURRENT (IF): GREEN 12 mA TYP. @ VF=5V
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ VF=5V
FORWARD CURRENT (IF): YELLOW 13 mA TYP. @ VF=5V

6. THE MAGNETICS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.

7. TE CONNECTIVITY 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.

YES	YELLOW	GREEN	5-6610126-2
2KV DECOUPLING CAPACITOR	LED1	LED2	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± – ; 1 PLC ± – ; 2 PLC ± .010 ; 3 PLC ± .005 ; 4 PLC ± – ; ANGLES ± –
MATERIAL 1
FINISH 1

DWN A. FERNANDEZ-DOCK5 17MAR2005
CHK D. FAROLE 17MAR2005
APVD D. FAROLE 17MAR2005
PRODUCT SPEC 108-2100
APPLICATION SPEC –
WEIGHT –

TE Connectivity

NAME 1X2 MAG45(TM) MODULAR JACK, 7G1 GIG SCHEMATIC, 01P1 SERIES CIRCUIT (10 PIN HORIZONTAL), SHIELDED, WITH RESISTOR LEDS, NO TABS

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-6610126	–

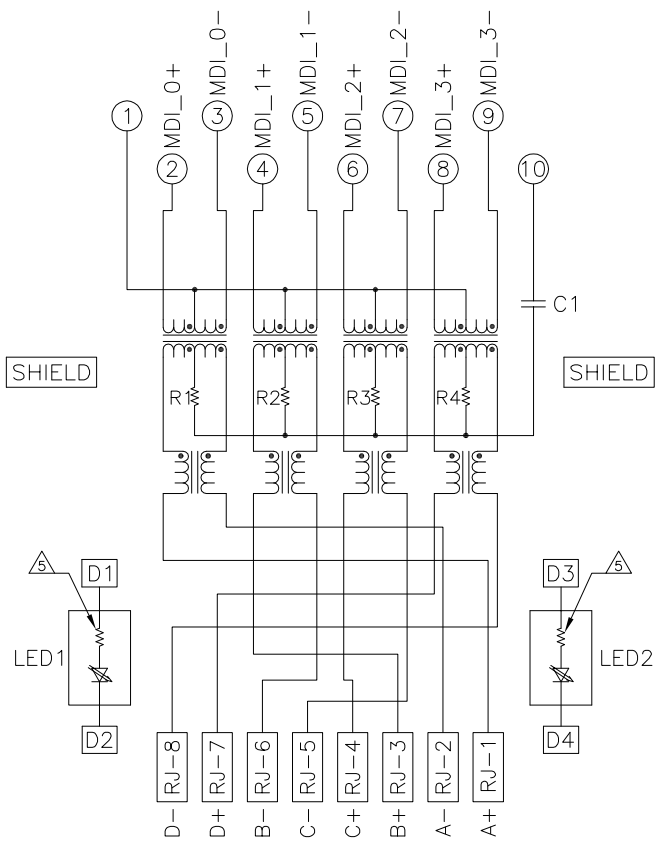
CUSTOMER DRAWING | SCALE 4:1 | SHEET 1 OF 2 | REV C

LOC	DIST
AA	22

REVISIONS

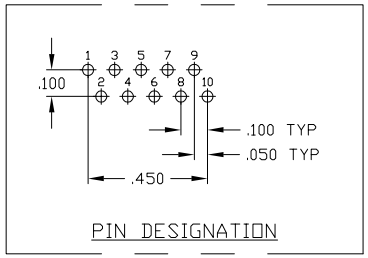
P	LTR	DESCRIPTION	DATE	DWN	APVD
	–	SEE SHEET 1	–	–	–

7G01P1 SERIES GIGABIT CIRCUIT 3 6

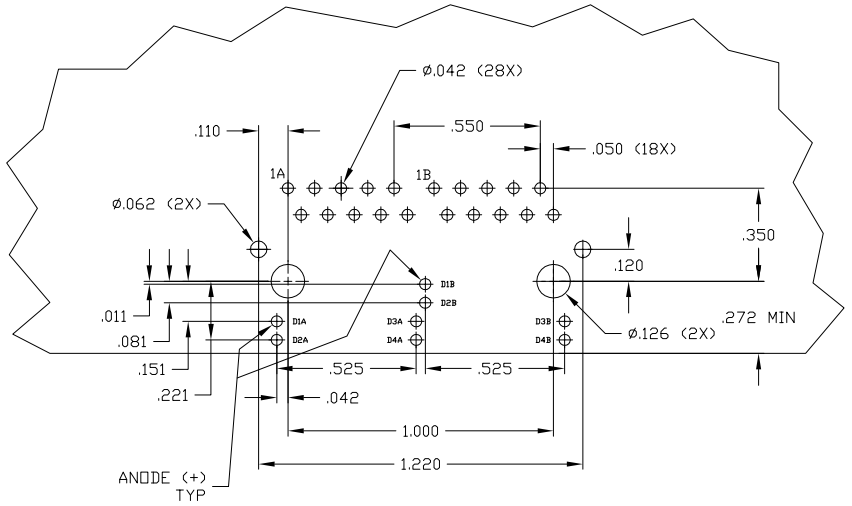


C1 = 1000 pF, 2kV CAPACITOR

R1–R4 = 75 OHMS, 1/16 W RESISTORS



PIN DESIGNATION



SUGGESTED PCB LAYOUT
(Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± –
2 PLC ± .010
3 PLC ± .005
4 PLC ± –
ANGLES ± –

MATERIAL –
FINISH –

DWN A. FERNANDEZ-DOCK5 17MAR2005
CHK D. FAROLE 17MAR2005
APVD D. FAROLE 17MAR2005
PRODUCT SPEC 108-2100
APPLICATION SPEC –
WEIGHT –

TE Connectivity

NAME 1X2 MAG45(TM) MODULAR JACK, 7G1 SCHEMATIC, 01P1 SERIES CIRCUIT (10 PIN HORIZONTAL), SHIELDED, WITH RESISTOR LEDS, NO TABS

SIZE A1 | CAGE CODE 00779 | DRAWING NO C-6610126 | RESTRICTED TO –

CUSTOMER DRAWING | SCALE 4:1 | SHEET 2 OF 2 | REV C