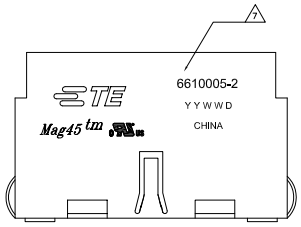
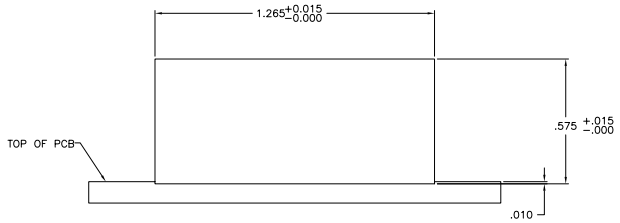
THIS DRAWING IS UNPUBLISHED. RELEASED FOR PUBLICATION: -.-.-

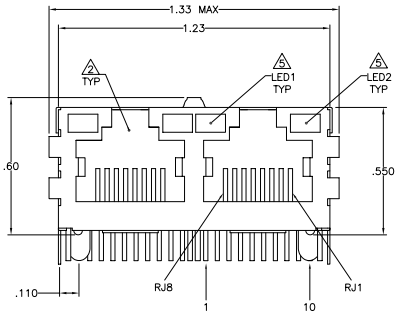
REVISIONS						
LTR	DESCRIPTION		DATE	DWN	APVD
L	REVISED PER ECO-11-012438		17SEP2011	JQ	KZ

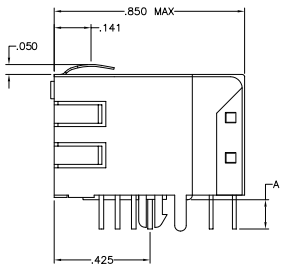
MECHANICAL:

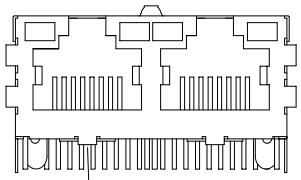


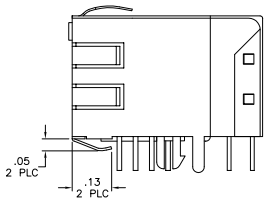


1X2 SUGGESTED PANEL CUTOUT









FOR 5-6610005-6 & 2-6610005-2

1. MATERIALS:
HOUSING - THERMOPLASTIC PET POLYESTER FLAMMABILITY RATING UL 94V-0.
ONLY FOR 3-6610005-5: HIGH TEMPERATURE NYLON, BLACK, UL 94V-0.
SHIELD - .010" THICK, C26800 BRASS PREPLATED WITH 30minch MIN SEMI-BRIGHT NICKEL; SOLDER TAB POSTS DIPPED WITH 150minch MIN SAC SOLDER.
MOD JACK CONTACTS - .0157" x .018", PHOSPHOR BRONZE, 50minch MIN OVERALL NICKEL UNDERPLATE, WITH SELECT 50minch MIN HARD GOLD FINISH PLATE. SOLDERTAILS WITH 100minch MIN MATTE TIN AND/OR SAC SOLDER DIP.
LIGHT EMITTING DIODE(LED) - DIFFUSED EPOXY LENS, .020" x .020" CARBON STEEL WIREFRAME LEADS PREPLATED WITH 80minch SILVER OVER 40minch NICKEL UNDERPLATE OVER 40minch COPPER UNDERPLATE, POST-PLATED WITH 100minch 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:
-APPLICATION: 10/100/1000 BASE-T
-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
33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
COMMON MODE REJECTION RATIO(CMRR):30dBMIN FROM 0.5MHz TO 100MHz
-ISOLATION VOLTAGE: THE CONNECTOR SHALL PROVIDE DC ISOLATION USING 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500 V/SEC AND WITH ALL PORTS CONNECTED.

4. ALL DIMENSIONS NOMINAL UNLESS OTHERWISE NOTED.

5. 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 (λ D): GREEN 568 nm TYP @ IF=20 mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20 mA
DOMINANT WAVELENGTH (λ D): 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 (λ D): GREEN 568 nm TYP @ VF=5V
FORWARD CURRENT (IF): GREEN 12mA TYP @ VF=5V
DOMINANT WAVELENGTH (λ D): YELLOW 588 nm TYP @ VF=5V
FORWARD CURRENT (IF): YELLOW 13mA TYP @ VF=5V

6. INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL TO ACCOMODATE CONNECTIONS FOR EITHER NIC OR HUB CONFIGURATION, OR SUPPORT AUTO-MDI/MDIX.

7. TE CONNECTIVITY LOGO, TE CONNECTIVITY PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.

8. THESE PARTS ARE 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 (275 C MAX ONLY FOR 3-6610005-5),10 SECONDS MAX.

9. OPERATING TEMPERATURE: FROM 0°C TO +70°C.

DIM A	BOTTOM TABS	LED1	LED1 250 OHM RESISTORS	LED2	LED2 250 OHM RESISTORS	PART NUMBER
.081±.010	NO	GREEN/YELLOW	NO	GREEN/YELLOW	NO	6-6610005-6
.145±.010	YES	GREEN/YELLOW	NO	GREEN/YELLOW	NO	5-6610005-6
.100±.010	NO	GREEN/YELLOW	NO	GREEN	NO	3-6610005-5
.125±.010	NO	GREEN/YELLOW	NO	GREEN	NO	2-6610005-5
.125±.010	NO	GREEN/YELLOW	NO	GREEN	YES	2-6610005-4
.145±.010	YES	YELLOW	YES	GREEN	YES	2-6610005-2
.145±.010	NO	GREEN	YES	GREEN/YELLOW	NO	1-6610005-5
.145±.010	NO	GREEN	YES	GREEN	YES	1-6610005-1
.145±.010	NO	GREEN/YELLOW	NO	GREEN/YELLOW	NO	6610005-6
.145±.010	NO	GREEN/YELLOW	NO	GREEN	YES	6610005-4
.145±.010	NO	YELLOW	YES	GREEN	YES	6610005-2

THIS DRAWING IS A CONTROLLED DOCUMENT.
DRN: R.GRZYBOWSKI 13JAN05
CHK: D.FAROLF 13JAN05
APVD: D.FAROLF 13JAN05
PRODUCT SPEC: 108-2100
APPLICATION SPEC: —
WEIGHT: —
CUSTOMER DRAWING
TE Connectivity
TITLE: 1X2 MAG45(TM) MODULAR JACK, 7G4 SCHEMATIC (10 PIN HORIZONTAL), 05 SERIES GIGABIT CIRCUIT, SHIELDED, WITH LEDS
SIZE: A1 CAGE CODE: 00779 DRAWING NO: C-6610005 RESTRICTED TO: —
SCALE: 4:1 SHEET: 1 OF 2 REV: L

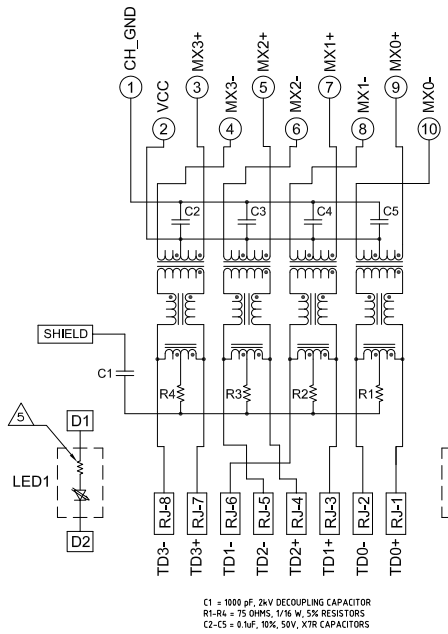
4805 (3/11)

LOC	DIST
AA	00

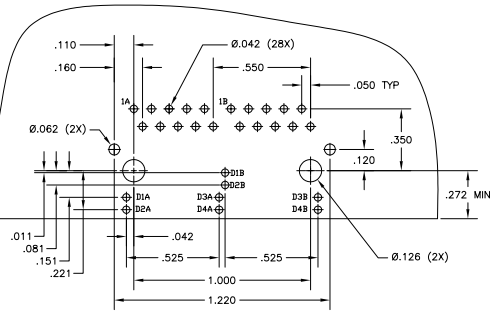
REVISIONS

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

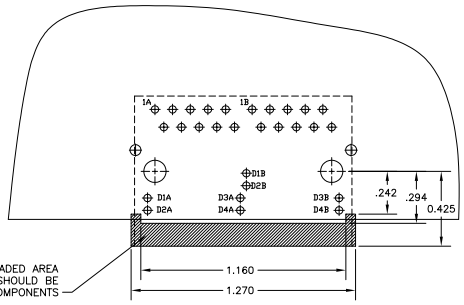
7G05 GIGABIT SCHEMATIC 3 6



C1 = 1000 pF, 2kV DECOUPLING CAPACITOR
R1-R4 = 75 OHMS, 1/16 W, 5% RESISTORS
C2-C5 = 0.1uF, 10%, 50V, X7R CAPACITORS

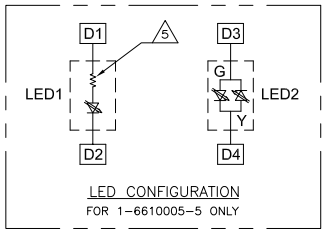


SUGGESTED PCB LAYOUT
(Component Side)

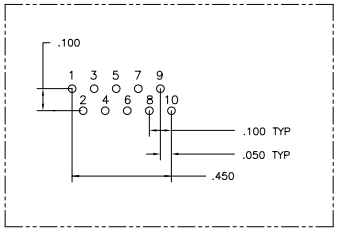


IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD SHOULD BE CLEAR OF ANY VIA HOLES AND COMPONENTS

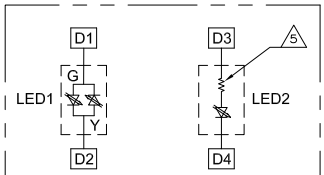
SUGGESTED PCB KEEP OUT AREA
(Component Side)



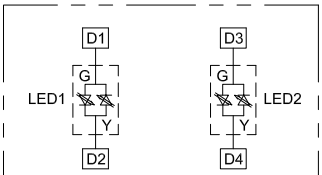
LED CONFIGURATION
FOR 1-6610005-5 ONLY



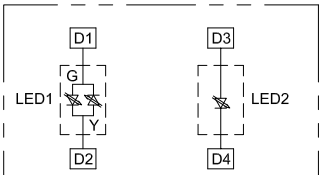
PIN DESIGNATIONS
(APPLIES TO ALL PORTS)



LED CONFIGURATION
FOR 6610005-4 & 2-6610005-4



LED CONFIGURATION
FOR 6610005-6, 5-6610005-6 & 6-6610006-6



LED CONFIGURATION
FOR 2-6610005-5 & 3-6610005-5

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
X PLC ± –
.X PLC ± .010
.XX PLC ± .005
.XXX PLC ± –
ANGLES ± –
FINISH –
MATERIAL –

DRN B.GRZYBOWSKI 13JAN05
CHK D.FAROLF 13JAN05
APVD D.FAROLF 13JAN05
PRODUCT SPEC 108-2100
APPLICATION SPEC –
WEIGHT –

TE Connectivity

TITLE: 1X2 MAG45(TM) MODULAR JACK, 7G4 SCHEMATIC (10 PIN HORIZONTAL), 05 SERIES GIGABIT CIRCUIT, SHIELDED, WITH LEDS

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-6610005	–

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

4805 (5/11)