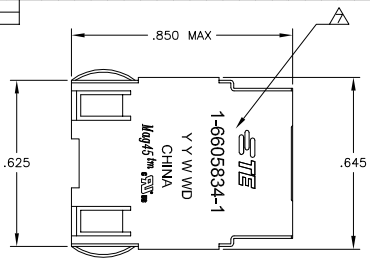
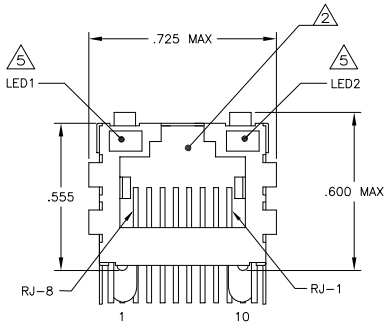
LOC	DIST
AA	22

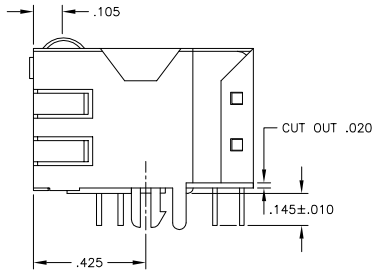
REVISIONS

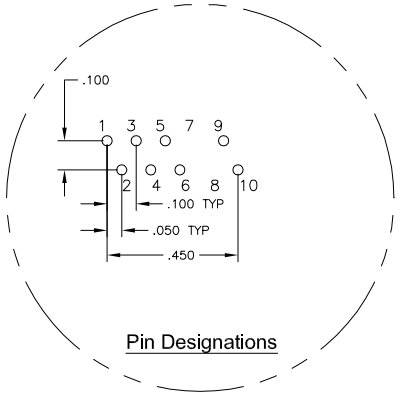
P	LTR	DESCRIPTION	DATE	DWN	APVD
	D1	REVISED PER ECO-11-005150	21MAR11	RK	HMR
	E	ECO-11-013435	30MAY2011	EL	LR

MECHANICAL:

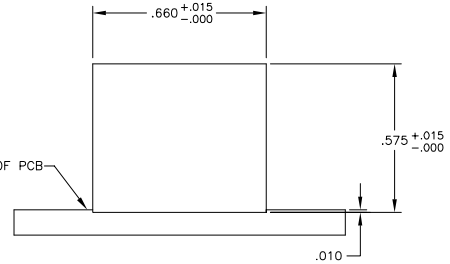








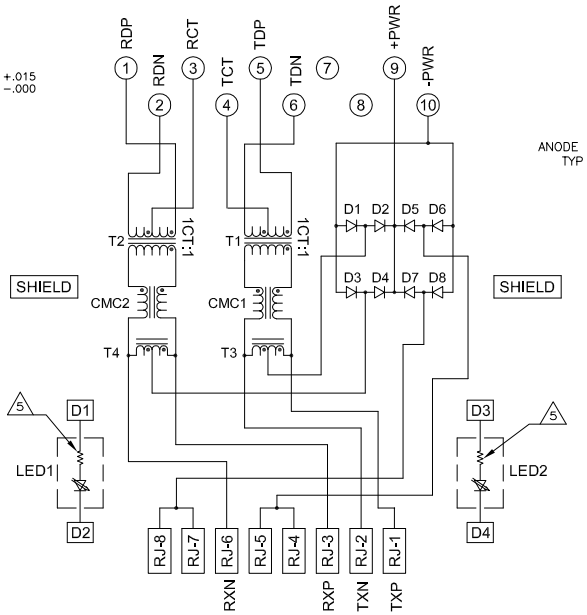
Pin Designations



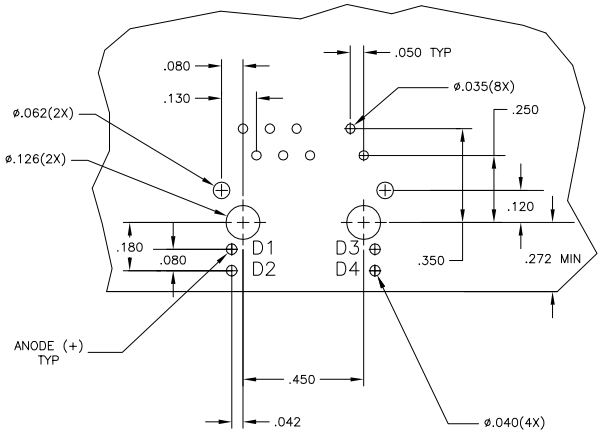
Suggested Panel Cutout

ELECTRICAL:

7D15 PoE MAGNETIC CIRCUIT 3 6



D1-D8 = RECTIFIER DIODE
- -FORWARD VOLTAGE, Vf = 1.2V MAX @ If= 0.5A
- -FORWARD CURRENT, If = 0.5A MAX
- -REVERSE VOLTAGE, Vr = 80V MAX



Suggested PCB Layout
(Component Side)

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 100µINCH 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): TX = 1:1, RX = 1:1
-OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
-POE CURRENT: 350mADC MAX
-PERFORMANCE @ 25°C:
INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
RETURN LOSS (RL): 18dB MIN FROM 0.5MHZ TO 30MHz
18-20LOG(f/30)dB MIN FROM 30.1MHz TO 60MHz
12dB MIN FROM 60.1MHz TO 80MHz
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:1500VAC (MAX) AT 60Hz FOR 60 SECS.

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

5. IF 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. @ 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. INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND ARE AUTO-MDI/MDIX CAPABLE.

7. TE CONNECTIVITY LOGO, 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,10 SECONDS MAX.

LED1 5	LED2 5	PART NUMBER
GREEN	GREEN	1-6605834-1
GREEN	YELLOW	6605834-1

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 L. VARELA - DOCK5 04MAR2005
CHK D. FAROLE 04MAR2005
APVD D. FAROLE 04MAR2005
PRODUCT SPEC 108-2100
APPLICATION SPEC -
WEIGHT -

TE Connectivity

NAME 1X1 MAG45(TM), MODULAR JACK, 7DN2 SCHEMATIC, 7D15 PoE CIRCUIT, SHIELDED, WITH RESISTOR LEDS

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-6605834	-

CUSTOMER DRAWING SCALE NTS SHEET 1 OF 1 REV E

4805 (3/11)