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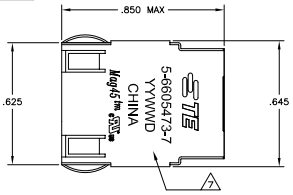
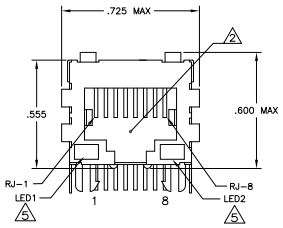
UC	DIST
AA	22

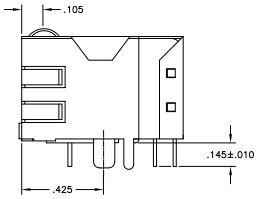
REVISIONS

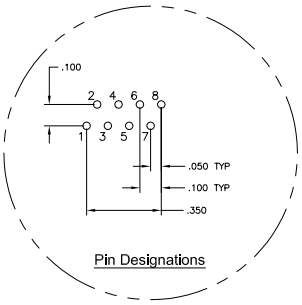
P	LTR	DESCRIPTION	DATE	DWN	APVD
	E	ECO-11-014921	020EC2011	JC	KZ

MECHANICAL:

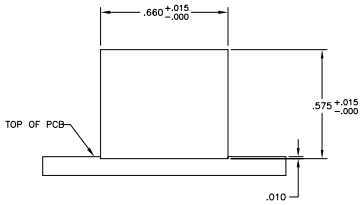




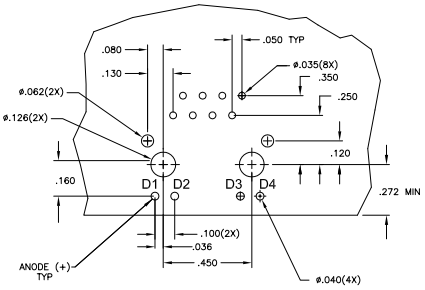




Pin Designations



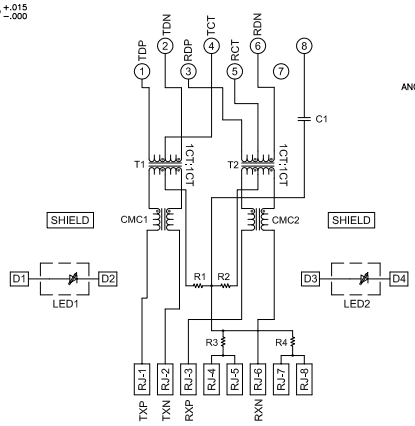
Suggested Panel Cutout



Suggested PCB Layout
(Component Side)

ELECTRICAL:

426P13 MAGNETIC CIRCUIT 3 6



C1=1000pF. 2kV CAPACITOR
R1-R4 = 75 OHMS, 1/16 W RESISTORS

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
-APPLICATION: 10/100 BASE-T
-IMPEDANCE: 100 OHMS
-TURNS RATIO (CHIP-CABLE): TX = 1:1, RX = 1:1
-OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
-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
33-20LOG(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 - +70°C.

5. LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA.
LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP @ IF=20mA
FORWARD VOLTAGE (VF): GREEN 2.2V TYP @ IF=20mA
DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP @ IF=20mA
FORWARD VOLTAGE (VF): YELLOW 2.1V TYP @ IF=20mA.

6. INDICATED CONNECTIONS ARE FOR NIC CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND THEREFORE SUPPORT AUTO-MDI/MDIX.

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 SOLDERING TEMPERATURE IS 260 °C MAX, 10 SECONDS MAX.

LED1	LED2	PART NUMBER
GREEN	GREEN	5-6605473-7
YELLOW	GREEN	6605473-9
GREEN	YELLOW	6605473-8

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: INCHES

TOLERANCES UNLESS OTHERWISE SPECIFIED:
3 PLC ± -
2 PLC ± .030
3 PLC ± .010
2 PLC ± .005
1 PLC ± -
ANGLES ± -
FINISH 1

MATERIAL 1

DWN L. VARELA - TOOKES 020AUG05
CHK D. FAROLE 020AUG05
APVD D. FAROLE 020AUG05
PACKAGE SPEC 10B-2100
APPLICATION SPEC -
WEIGHT -
CUSTOMER DRAWING

TE Connectivity

NAME 1X1 MAG45(TM), 4N2P13 10/100 ETHERNET SCHEMATIC, 426P13 MAGNETIC CIRCUIT, SHIELDED, DECOUPLING CAPACITOR, WITH LEDS

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-6605473	-

SCALE NTS SHEET 1 OF 1 REV E

AMP 4805 REV 310MR2000

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