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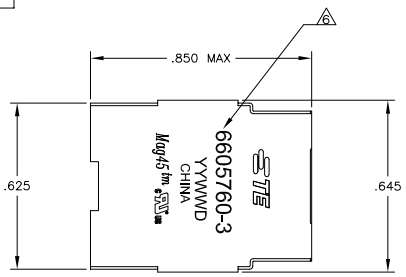
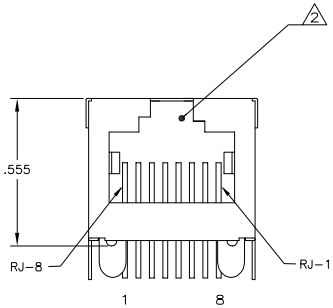
LOC	DIST
AA	22

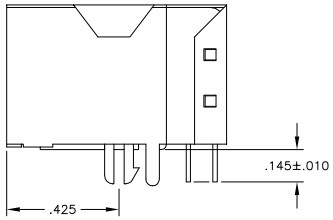
REVISIONS

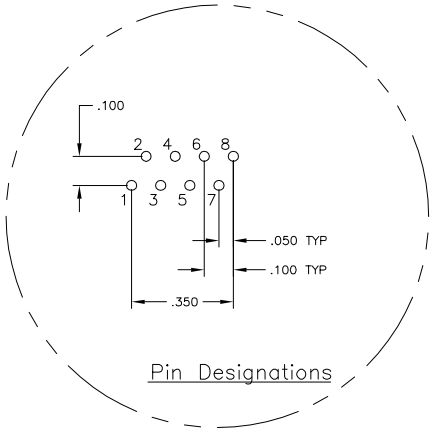
P	LTR	DESCRIPTION	DATE	DWN	APVD
	B	REV PER ECO-08-032095	10MAR2008	VL	LR
	C	ECO-11-015766	30MAY2011	EL	LR

MECHANICAL:









Pin Designations

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.

2. RJ45 JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68, SUB PART F.

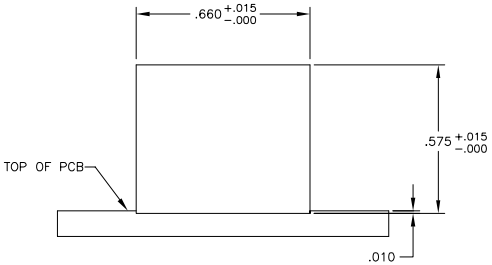
3. MAGNETICS
   - IMPEDANCE: 100 OHMS
   - TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1
   - OPEN CIRCUIT INDUCTANCE (OCL): 350µH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0°C TO 70°C, TX AND RX
   - PERFORMANCE @ 25°C:
     INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
     RETURN LOSS (RL): 18dB 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:2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC.

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

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

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

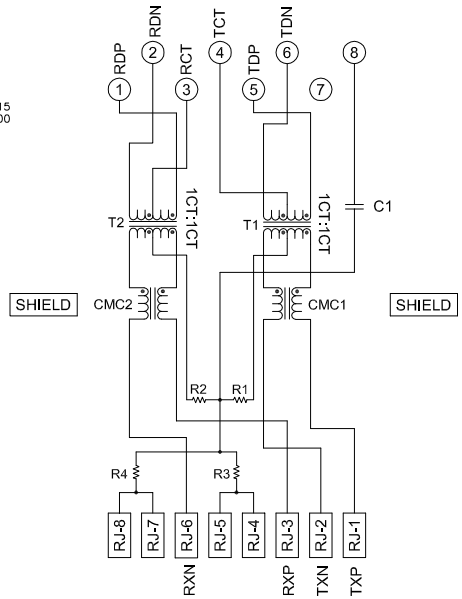
7. THE PART IS RECOMMENDED FOR WAVE SOLDERING PROCESS, PREHEAT TEMPERATURE IS 120°C TO 160°C, 120 SECONDS TO 180 SECONDS, PEAK WAVE SOLDERING TEMPERATURE IS 260°C MAX, 10 SECONDS MAX.



Suggested Panel Cutout

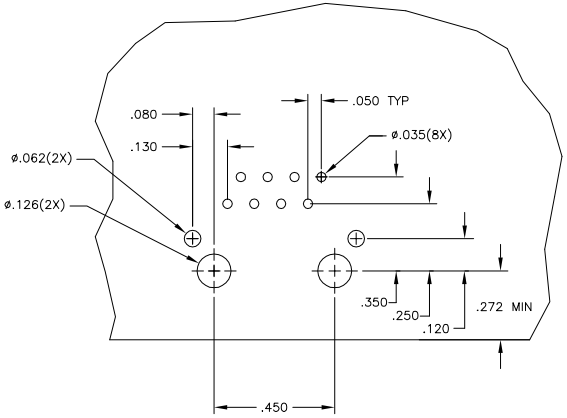
ELECTRICAL:

726 SERIES MAGNETIC CIRCUIT 3 5



C1 = 1000 pF, 2kV DECOUPLING CAPACITOR

R1-R4 = 75 OHMS, 1/16 W RESISTORS



Suggested PCB Layout
(Component Side)

THIS DRAWING IS A CONTROLLED DOCUMENT.	DWN L. VARELA 01MAR2005 DOCK5	TE Connectivity	6605760-3 PART NUMBER
DIMENSIONS: INCHES	CHK D. FAROLE 01MAR2005		
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± - 1 PLC ± - 2 PLC ± .010 3 PLC ± .005 4 PLC ± - ANGLES ± -	APVD D. FAROLE 01MAR2005	NAME 1X1 MAG45(TM) MODULAR JACK, 7N2 SCHEMATIC, 726 MAGNETIC CIRCUIT, DECOUPLING CAPACITOR, SHIELDED, NO LEDS, AND NO PANEL GROUND TABS	
MATERIAL 1	PRODUCT SPEC 108-2100		
FINISH 1	APPLICATION SPEC —	SIZE A1 CAGE CODE 00779 DRAWING NO ©-6605760	RESTRICTED TO —
	WEIGHT —	CUSTOMER DRAWING	SCALE NTS SHEET 1 OF 1 REV C