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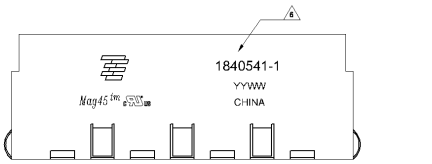
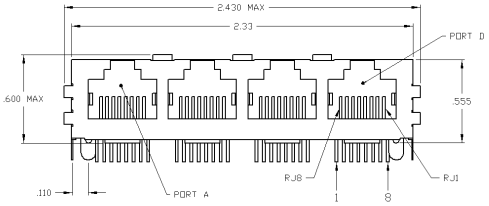
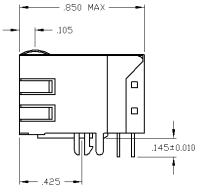
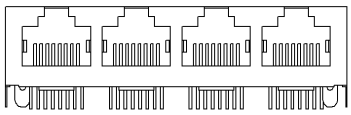
REVISIONS						
LTR	DESCRIPTION	DATE	DWN	APVD
B	REV PER ECO-08-038606	28AUG2008	VL	TX

MECHANICAL:

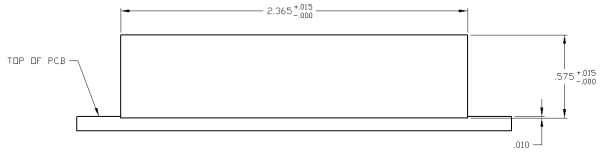








P/N 1840541-3 SHOWN
NO PANEL GROUNDS



1X4 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.
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: COMPLIES WITH IEEE802.3 2002, PARA 23.5.1.1, ITEM b.
4. OPERATING TEMPERATURE: FROM 0°C TO +70°C.
5. INDICATED CONNECTIONS ARE FOR HUB CONFIGURATION. THE MAGNETICS ARE SYMMETRICAL, AND SUPPORT AUTO-MDI/MDIX.
6. TYCO ELECTRONICS LOGO, PART NUMBER, DATE CODE, COUNTRY OF ORIGIN AND AGENCY APPROVAL MARKING IN APPROXIMATE LOCATION SHOWN.
7. 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.

WITH HIGH IMPEDANCE CORE	0	1840541-3
	7	1840541-1
REMARK	PANEL GROUND TABS	PART NUMBER

THIS DRAWING IS A CONTROLLED DOCUMENT.

DRN: Randy Qu 12 AUG 2007
CHK: Tommy Ren 13 AUG 2007
APVD: Keith Zhu 13 AUG 2007

Tyco Electronics — Tyco Electronics Corporation, ChangPing, China

DIMENSIONS: INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED:
2 PLC ± -
1 PLC ± .X
2 PLC ± .XX
3 PLC ± .XXX
4 PLC ± -
ANGLES ± -

PRODUCT SPEC: 108-2100
APPLICATION SPEC: –
WEIGHT: –

1X4 MAG45(TM) MODULAR JACK, 7K1 SCHEMATIC, 786K1 SERIES CIRCUIT, SHIELDED, OPTIONAL PANEL GROUND TABS, DECOUPLING CAPACITOR, NO LEDS

SIZE: A1 | CAGE CODE: 00779 | DRAWING NO: 1840541 | RESTRICTED TO: –

MATERIAL: ⚠1
FINISH: ⚠1

CUSTOMER DRAWING | SCALE 4-1 | SHEET 1 OF 2 | REV B

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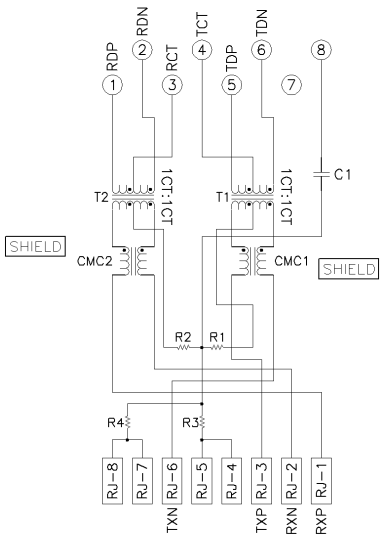
REVISIONS					
LTR	DESCRIPTION	DATE	DWN	APVD
–	SEE SHEET 1	–	–	–

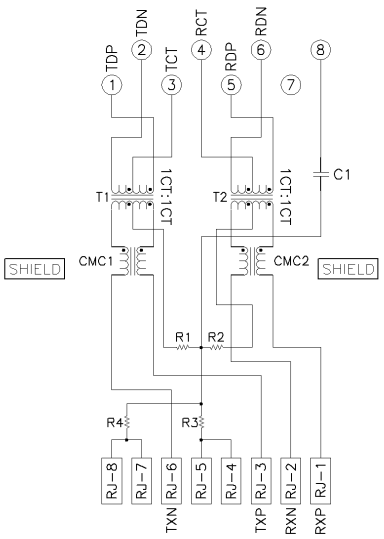
LOC AA DIST 00

ELECTRICAL:

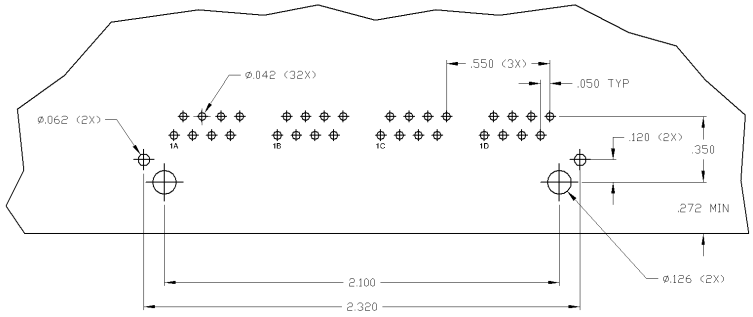
766K1 SERIES MAGNETIC CIRCUIT 3 5
PORTS A & C



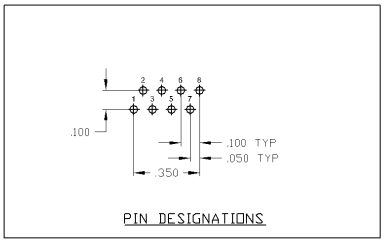
766K1 SERIES MAGNETIC CIRCUIT 3 5
PORTS B & D



C1 = 1000 pF, 3kV CAPACITOR
R1-R4 = 75 OHMS, 1/16W RESISTORS



SUGGESTED PCB LAYOUT
(Component Side)



PIN DESIGNATIONS

THIS DRAWING IS A CONTROLLED DOCUMENT.	DWN Randy Qu 12 AUG 2007	Tyco Electronics	Tyco Electronics Corporation ChangPing, China
	CHK Tommy Ren 13 AUG 2007		
	APVD Keith Zhu 12 AUG 2007	TITLE	1X4 MAG45(TM) MODULAR JACK, 7K1 SCHEMATIC, 766K1 SERIES CIRCUIT, SHIELDED, OPTIONAL PANEL GROUND TABS, DECOUPLING CAPACITOR, NO LEDS
	PRODUCT SPEC 108-2100		
	APPLICATION SPEC –	SIZE A1	CAGE CODE 00779
	WEIGHT –	DRAWING NO 1840541	RESTRICTED TO –
MATERIAL –	FINISH –	CUSTOMER DRAWING	SCALE 4:1 SHEET 2 OF 2 REV B