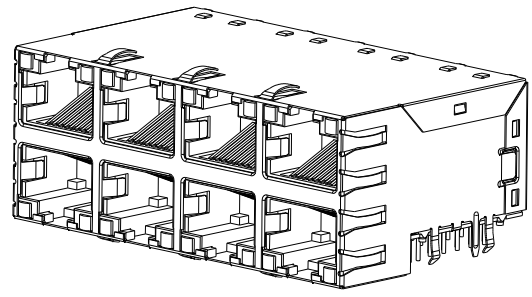


REV	DATE	DESCRIPTION	BY	CHK	APP
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B	ECO-10-025821				

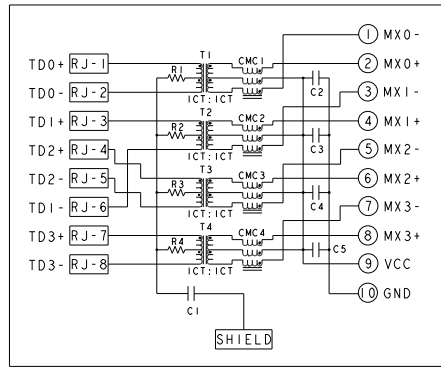


S8G31 GIGABIT CIRCUIT

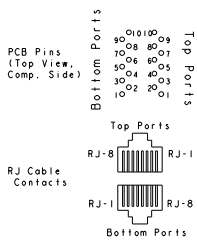
Top and Bottom Ports

- MATERIALS:**
 - HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0.
 - SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS.
 - CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
 - LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME LEADS, PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL OVER 1.02um MIN COPPER UNDERPLATE, POST PLATED WITH 2.54um MIN MATTE TIN AND/OR 2.54um MIN SAC SOLDER DIP OR PURE TIN SOLDER DIP.
- MAGNETICS:**
 - APPLICATION: 10/100/1000 BASE-T
 - IMPEDANCE: 100ohm
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mA DC 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): 30dB MIN FROM 0.5MHz TO 100MHz
 - ISOLATION VOLTAGE: COMPLIES WITH IEEE802.3 2005, PARA 40.6.1.1, ITEM b

- PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN.
- TYCO ELECTRONICS LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.
- RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATIONS PART 68 SUBPART F.
- LED IS DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA
LED COLOR: DOMINANT WAVELENGTH (λD):
GREEN 568 nm TYP at IF=20mA
YELLOW 588 nm TYP at IF=20mA
ORANGE 610 nm TYP at IF=20mA
FORWARD VOLTAGE (VF):
GREEN 2.2V TYP at IF=20mA
YELLOW 2.1V TYP at IF=20mA
ORANGE 2.2V TYP at IF=20mA
- INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.
- 8 OPERATING TEMPERATURE: FROM 0°C TO 70°C
- 9 THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260 °C MAX, 10 SECONDS MAX.



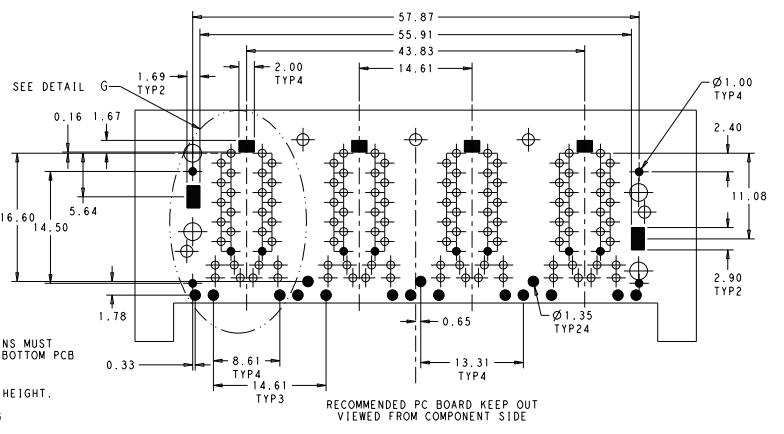
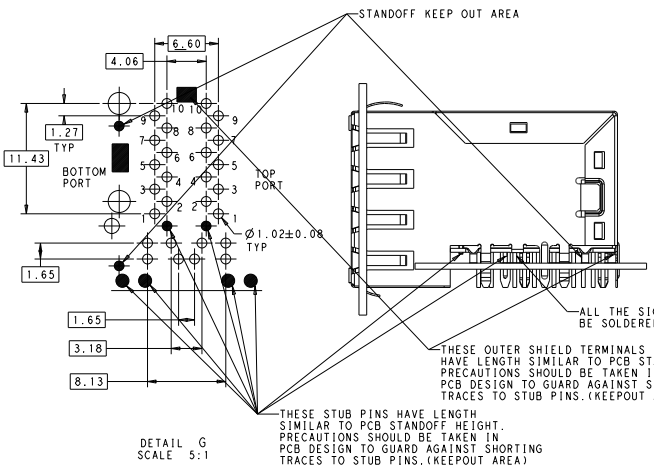
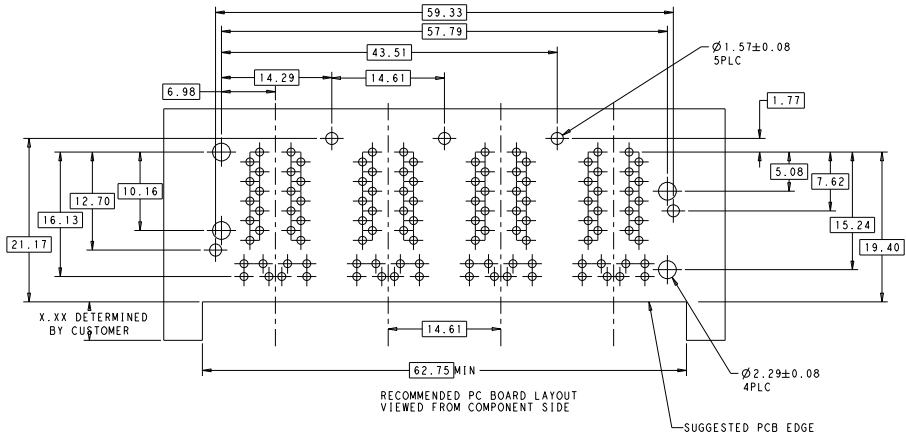
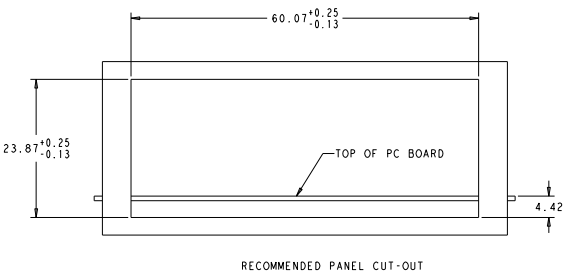
Pin Designations
(Repeat for each vertical pair of ports.)



C1 = 1000pF, 2kV
C2-C5 = 470pF, 10V, 50V
R1-R4 = 75ohms, 1/16W

TOP RIGHT LED	TOP LEFT LED	BOTTOM RIGHT LED	BOTTOM LEFT LED	REAR PCB GND TABS	PART NUMBER
GREEN/ORANGE	GREEN/ORANGE	GREEN/ORANGE	GREEN/ORANGE	3	1840230-7
GREEN/ORANGE	GREEN	GREEN/ORANGE	GREEN	3	1840230-6
GREEN	GREEN/YELLOW	GREEN	GREEN/YELLOW	3	1840230-5
GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	3	1840230-4
YELLOW	GREEN	YELLOW	GREEN	3	1840230-3
YELLOW	GREEN	GREEN	YELLOW	3	1840230-2
GREEN	GREEN	GREEN	GREEN	3	1840230-1

<p>DATE: 08/07/08</p> <p>FILE: 1840230-1</p> <p>REV: 1</p> <p>BY: []</p> <p>CHK: []</p> <p>APP: []</p>	<p>TYCO ELECTRONICS</p> <p>2x4 OFFSET MAG45(TM), MODULE JACK, S8G31 GIGABIT CIRCUIT, W/LED, 10 PIN VERTICAL, REAR PCB GND TABS</p> <p>DATE CODE: 080708</p> <p>REV: A</p> <p>00779</p> <p>1840230</p>	<p>TYCO ELECTRONICS</p> <p>Chengde, China</p> <p>1840230-1</p> <p>1 of 4</p>
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DATE	00072006	FILE NO.	00072006
DESIGNER	WILLIAM	FILED BY	00072006
DATE	00072006	DATE	00072006
SCALE	1:1	SCALE	1:1
PROJECT	00779	PROJECT	1840230
CUSTOMER DRAWING		CUSTOMER DRAWING	

TYPE ELECTRONICS
ChengPing China

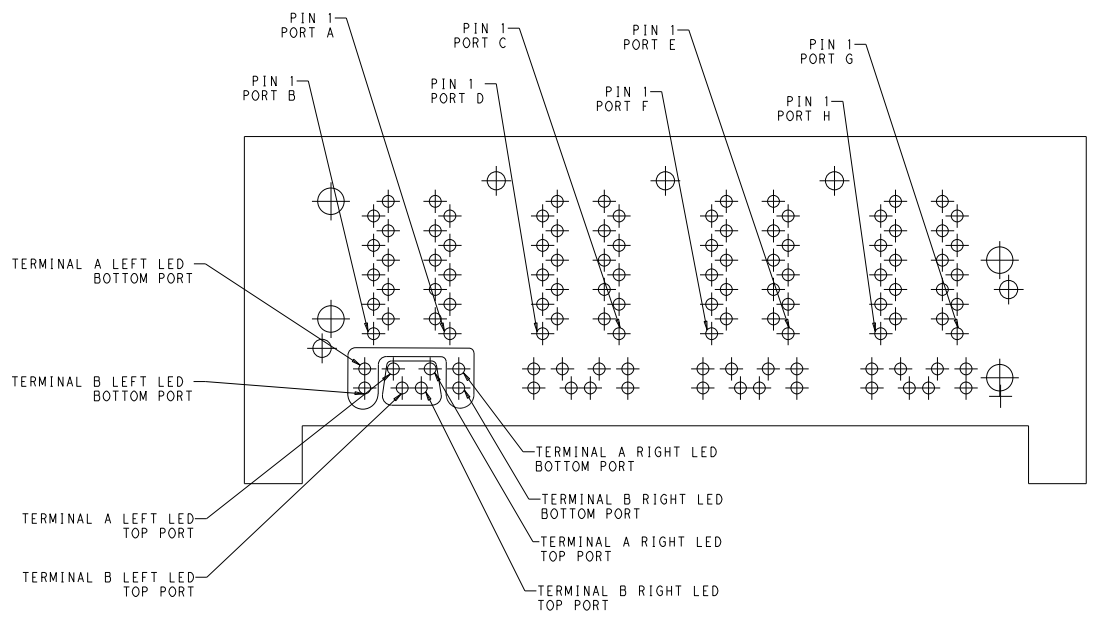
2x4 OFFSET MAG451(TM), MODULE JACK,
S0531 GIGABIT CIRCUIT, W/LED,
10 PIN VERTICAL, REAR PCB GND TABS

DATE 00072006

SCALE 1:1

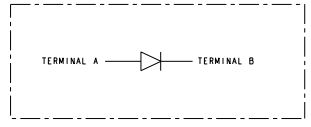
SHEET 3 OF 4

REV. NO.		REV. DATE		REV. BY		REV. DESCRIPTION	
AA	00						SEE LAST SHEET

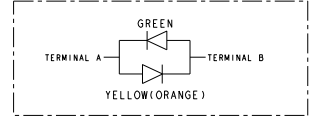


LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE

SINGLE COLOR LED



BI COLOR LED



DATE	FILE NO.	DOC NO.	REV. NO.	REV. DATE	REV. BY	REV. DESCRIPTION
07/15/2015	000779	000779	00			SEE LAST SHEET

DESCRIPTION	DATE	FILE NO.	DOC NO.	REV. NO.	REV. DATE	REV. BY	REV. DESCRIPTION
2x4 OFFSET MAG45(TM), MODULE JACK, S6531 GIGABIT CIRCUIT, W/LED, 10 PIN VERTICAL, REAR PCB GND TABS							

DATE	FILE NO.	DOC NO.	REV. NO.	REV. DATE	REV. BY	REV. DESCRIPTION
07/15/2015	000779	000779	00			SEE LAST SHEET