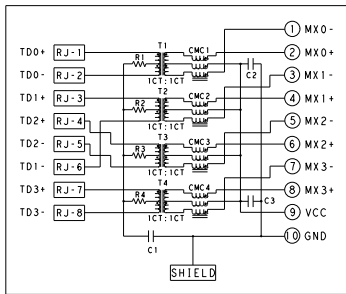


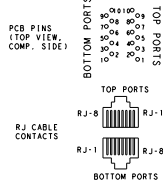
S8G56 GIGABIT CIRCUIT Δ
TOP AND BOTTOM PORTS



C1 = 1000pF, 2kV, CAPACITOR
C2 - C3 = 10nF, 50V, CAPACITORS
R1-R4 = 75 Ohms, 1/16 W, RESISTORS

PIN DESIGNATIONS

(REPEAT FOR EACH VERTICAL PAIR OF PORTS)



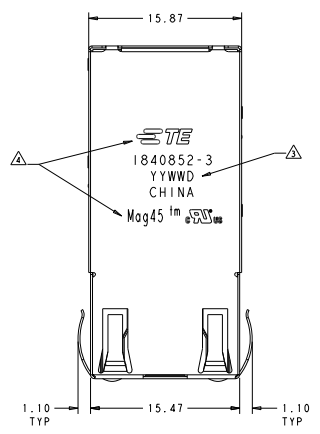
- MATERIALS:**
 - HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0.
 - SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS.
 - CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD 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: 100 Ohms
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC 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: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC AND WITH ALL PORTS CONNECTED.
- PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE: YY IS YEAR, WW IS WORK WEEK, D IS DAY OF WEEK, WITH SUNDAY=1.
- TE CONNECTIVITY LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.
- RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATION PART 68 SUBPART F.
- LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX. 20mA.
 - DOMINANT WAVELENGTH (λ D):
 - GREEN, 568nm TYP AT IF=20mA
 - YELLOW, 588nm TYP AT IF=20mA
 - FORWARD VOLTAGE(VF)
 - GREEN, 2.2V TYP AT IF=20mA
 - YELLOW, 2.1V TYP AT IF=20mA
- INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.
- DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.
- OPERATING TEMPERATURE: FROM 0 °C TO 70 °C
- THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS. PEAK TEMPERATURE 260 °C MAX. 10 SECONDS MAX.

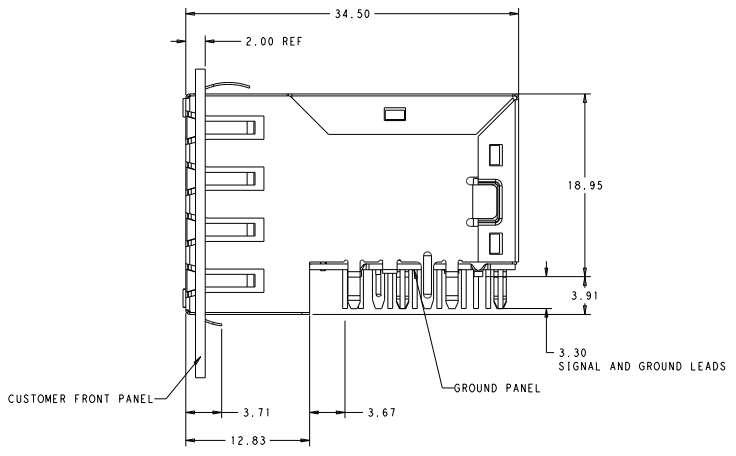
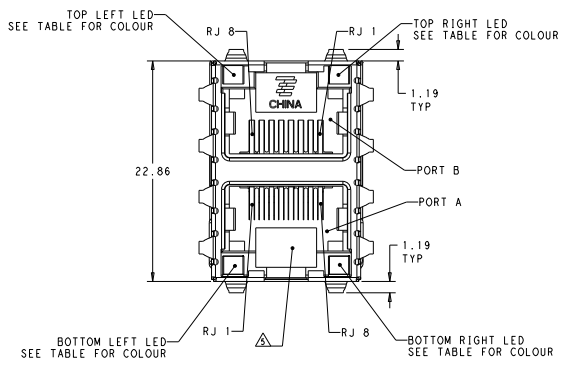
THIS PRODUCT HAS NOT COMPLETED
VALIDATION/QUALIFICATION TESTING

| | | | | |
|---------------------------------------|---------------|-----------------|------------------|---|
| GREEN/YELLOW | GREEN/YELLOW | GREEN/YELLOW | GREEN/YELLOW | 1840852-3 |
| TOP LEFT LED | TOP RIGHT LED | BOTTOM LEFT LED | BOTTOM RIGHT LED | PART NUMBER |
| THIS DRAWING IS A CONTROLLER DOCUMENT | | | | |
| DRAWING NO. | | REV | DATE | DESCRIPTION |
| 1840852-3 | | A | 00779 | 2X1 MAG45(TM) MODULE JACK, OFFSET S8G56 GIGABIT CIRCUIT, WITH LED |
| MATERIAL | | QUANTITY | UNIT | REVISIONS TO |
| COPPER | | 1 | PCB | 1 |
| CUSTOMER DRAWING | | 1840852 | 1 | 4 |

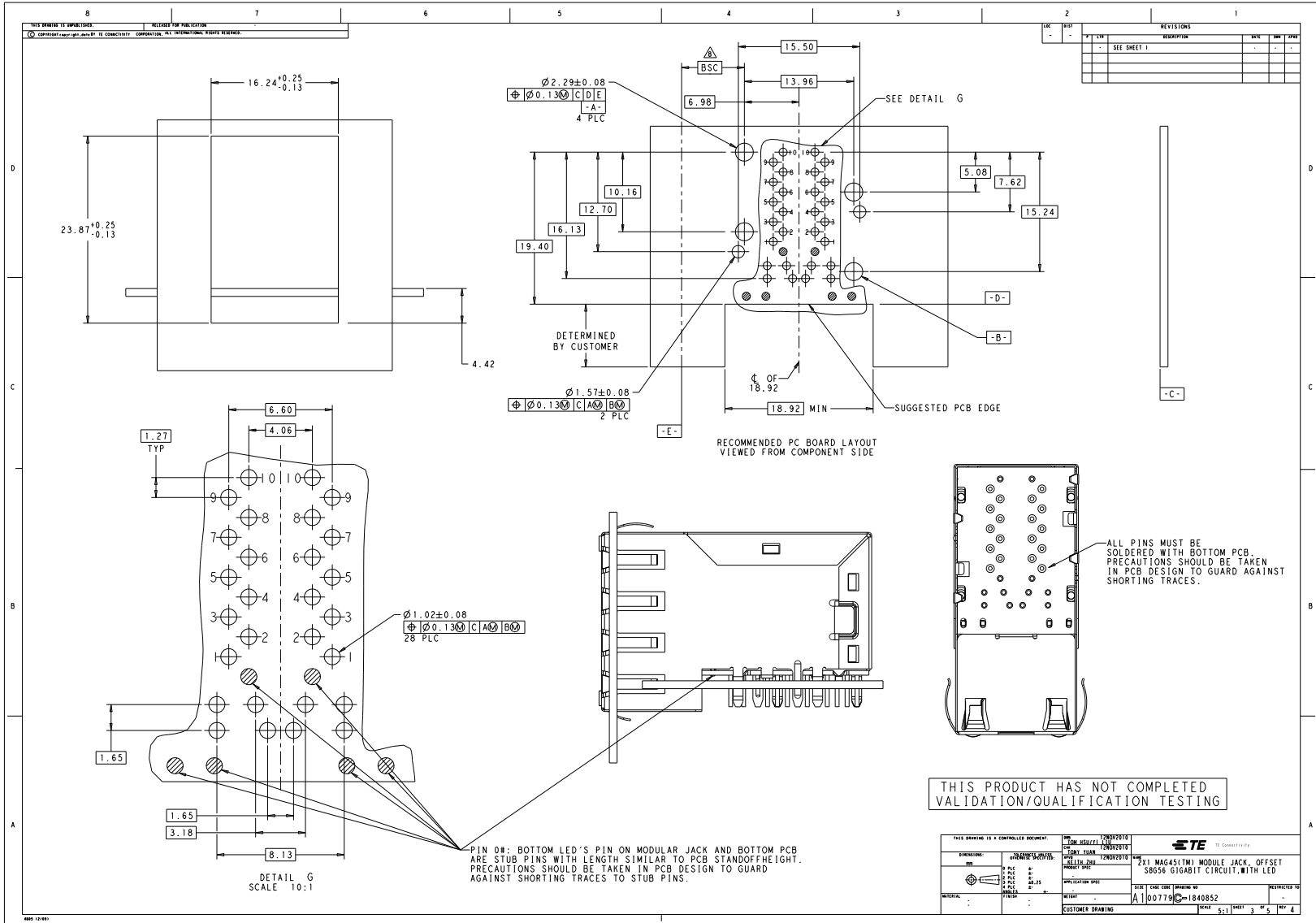
| REV | DESCRIPTION | DATE | BY | CHK |
|-----|-------------|------|----|-----|
| 1 | SEE SHEET 1 | | | |



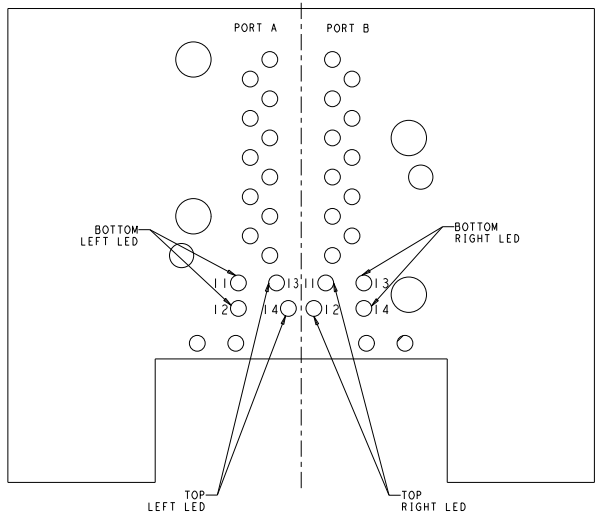
THIS PRODUCT HAS NOT COMPLETED
VALIDATION/QUALIFICATION TESTING



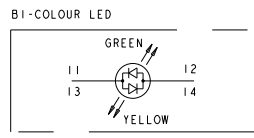
| | | | | |
|--|----------------------------|----------------------------|----------------------------|----------------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | REV: 001 | DATE: 20140720 | |
| DRAWING NO: 1840852-3 PART NO: 1840852-3 TITLE: 2X1 MAG45(TM) MODULE JACK, OFFSET 80G56 GIGABIT CIRCUIT, WITH LED | | REV: 001 | DATE: 20140720 | |
| DRAWING NO: 1840852-3 PART NO: 1840852-3 TITLE: 2X1 MAG45(TM) MODULE JACK, OFFSET 80G56 GIGABIT CIRCUIT, WITH LED | REV: 001 DATE: 20140720 | REV: 001 DATE: 20140720 | REV: 001 DATE: 20140720 | REV: 001 DATE: 20140720 |



| REV | DESCRIPTION | DATE | BY | CHK |
|-----|-------------|------|----|-----|
| 1 | SEE SHEET 1 | | | |
| | | | | |
| | | | | |



LED HOLE DESIGNATIONS
 VIEWED FROM COMPONENT SIDE
 SCALE 8:1




THIS PRODUCT HAS NOT COMPLETED
 VALIDATION/QUALIFICATION TESTING

| | | | | |
|--|--|---|--------------|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT | | REV: 001/01 | PROJ: 201010 | TE Connectivity |
| DATE: 01/11/2010 TIME: 10:00:00 USER: j... PROJECT: ... | | REV: 001/01 | PROJ: 201010 | |
| PART: ... QTY: ... UNIT: ... | | PART: 2X1 MAG451(TM) MODULE JACK, OFFSET 80656 GIGABIT CIRCUIT, WITH LED | | SITE: ... PART: A 00779 1840852 CUSTOMER DRAWING: ... |

| REV | DATE | DESCRIPTION | BY | CHK | APP |
|-----|------|-------------|----|-----|-----|
| - | - | SEE SHEET 1 | - | - | - |
| - | - | - | - | - | - |
| - | - | - | - | - | - |

| 1840852 | | | | | STOCK DISPOSITION | | | |
|---|-----|--|--------------------|----------|----------------------------|---------------------------------|-------------------------------|--------------------------------|
| 2X1 MAG451(TM) MODULE JACK, OFFSET, S8056 GIGABIT CIRCUIT, WITH LED | | | | | A: CONTINUE AS IS | D: USE OLD FIRST | | |
| REVISION HISTORY | | | | | B: REWORK | E: PARTS TO CONFORM | | |
| | | | | | C: SCRAP | F: OTHER | | |
| DATE | REV | CHANGES | REASON | APPROVAL | INVENTORY (A,B,C,D,E,F) | WORK IN PROCESS (A,B,C,F) | SUPPLIER ORDERS (A,E,F) | OPEN CUST ORDERS (A,E,F) |
| 12NOV2010 | 1 | INITIAL RELEASE | INITIAL RELEASE | KZ | - | - | - | - |
| 25NOV2010 | 2 | CORRECT DRAFTING ERROR FOR CLARIFICATION | ENGINEERING CHANGE | KZ | - | - | - | - |
| 13DEC2010 | 3 | SHEET 1: CHANGE LED COLOUR "GREEN" TO "GREEN/YELLOW" SHEET 4: REMOVE SINGLE COLOUR LED SKETCH | ENGINEERING CHANGE | KZ | - | - | - | - |

THIS PRODUCT HAS NOT COMPLETED
 VALIDATION/QUALIFICATION TESTING

| | | | | |
|--|--|---|-----------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT | | REV 001/01 | 12NOV2010 |  TE Connectivity |
| DRAWING NO: 1840852 PART NO: 1840852 REV: 001/01 DATE: 12NOV2010 | | REV 001/01 | 12NOV2010 | |
| TITLE: 2X1 MAG451(TM) MODULE JACK, OFFSET S8056 GIGABIT CIRCUIT, WITH LED | | SITE: CHN CUST: 00779 DRAWING NO: 1840852 | | SHEET 5 OF 5 REV 4 |