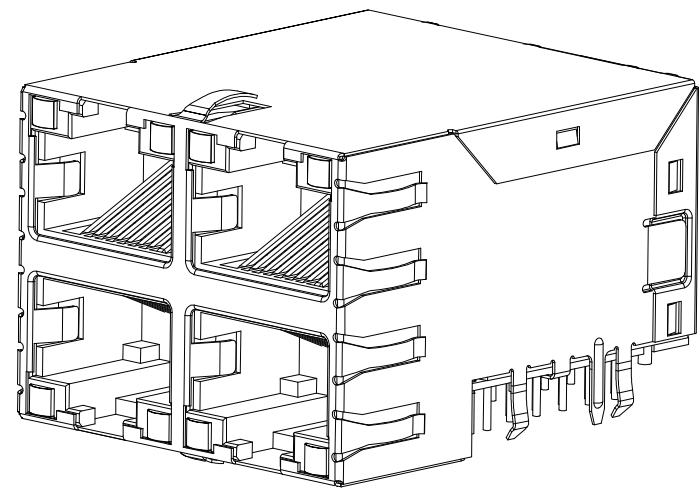
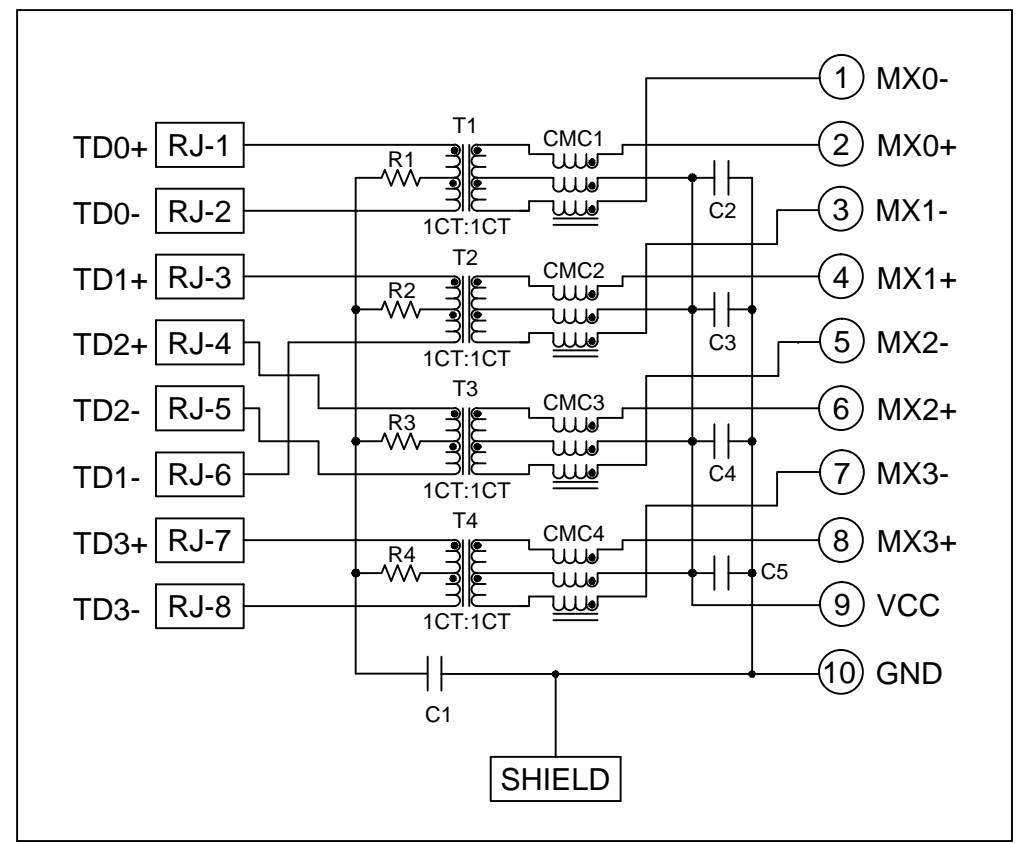


| REVISIONS | | | | | |
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| REV | DATE | DESCRIPTION | BY | CHK | APP |
| D | 15APR2013 | LOGO CHANGE | GZ | KZ | |



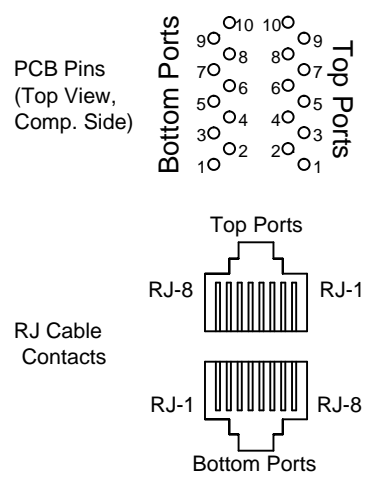
S8G16 GIGABIT CIRCUIT

Top and Bottom Ports



Pin Designations

(Repeat for each vertical pair of ports.)



- 1 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.

- 2 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: COMPLIES WITH IEEE802.3 2002, PARA 40.6.1.1, ITEM b.

- 3 PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE "YY" IS THE YEAR, "WW" IS THE WEEK, "D" IS THE DAY OF WEEK, WITH SUNDAY="1".

- 4 TRP LOGO, TRANSPOWER LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.

- 5 RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATION PART 68 SUBPART F.

- 6 LEDs ARE DRIVEN WITH CONSTANT CURRENT AT APPROX. 20mA.
- DOMINANT WAVELENGTH (λD)
 - 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

- 7 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.

- 8 OPERATING TEMPERATURE: FROM 0 °C TO 70 °C

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

| | | | | | |
|---------------------|----------------------|------------------|-------------------|-------------------|-------------|
| GREEN | GREEN | GREEN | GREEN | 1 | 1840214-4 |
| GREEN | YELLOW | GREEN | YELLOW | 1 | 1840214-3 |
| YELLOW | GREEN | GREEN | YELLOW | 1 | 1840214-2 |
| GREEN/YELLOW | GREEN/YELLOW | GREEN/YELLOW | GREEN/YELLOW | 1 | 1840214-1 |
| BOTTOM LED 2 (LEFT) | BOTTOM LED 1 (RIGHT) | TOP LED 2 (LEFT) | TOP LED 1 (RIGHT) | REAR PCB GND TABS | PART NUMBER |

THIS DRAWING IS A CONTROLLED DOCUMENT.

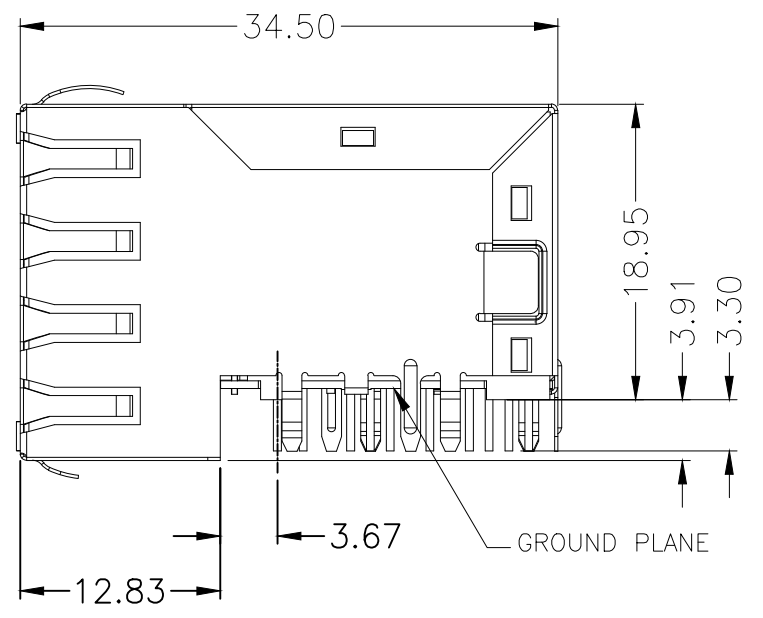
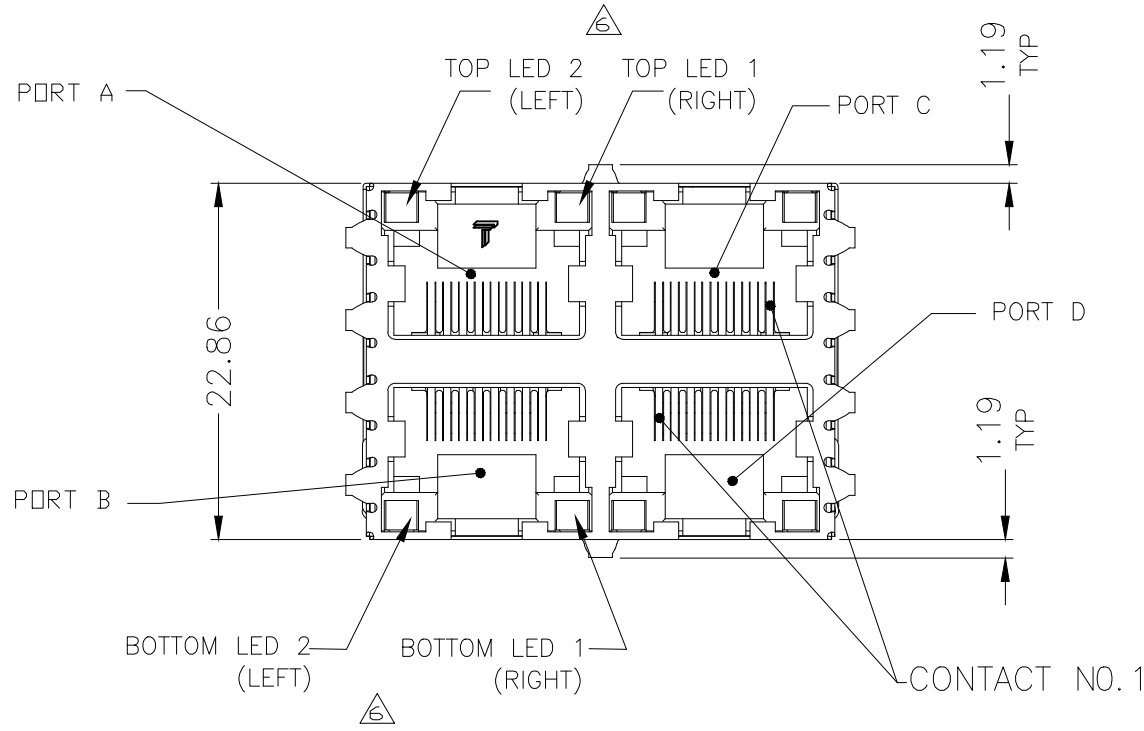
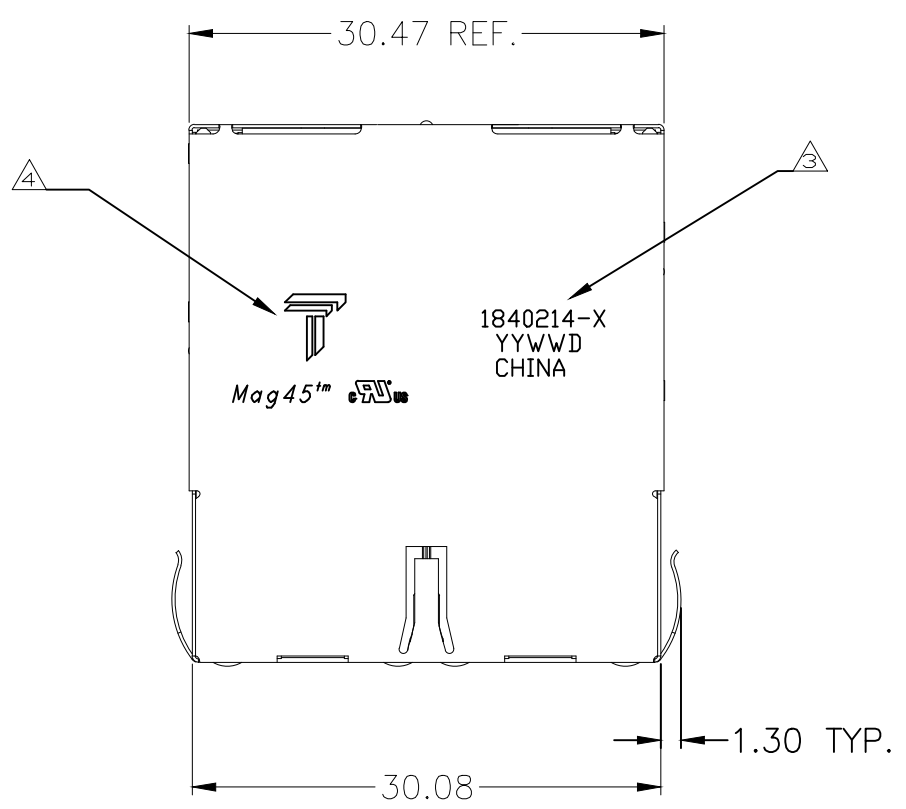
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|---------------------------------|--------------|---|------------------|
| DATE: 30JUL2007 | BY: DALE PAN | CHK: KEITH ZHU | APP: TEDDY XIANG |
| | | | |
| TRP connector Dongguan China | | | |
| DIMENSIONS: min | | TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 0.25 1 PLC ± 0.25 2 PLC ± 0.25 3 PLC ± 0.25 4 PLC ± 0.25 ANGLES FINISH | |
| MATERIAL: - | | WEIGHT: - | |
| CUSTOMER DRAWING | | SCALE: 1:1 | |

NAME: 2X2 MAG45(TM) MODULAR JACK, OFFSET S8G16 GIGABIT CIRCUIT, W/ LED'S SHIELDED, WAVE PANEL GROUND TABS

SIZE: A1 CAGE CODE: 1840214

SHEET 1 OF 4 REV D

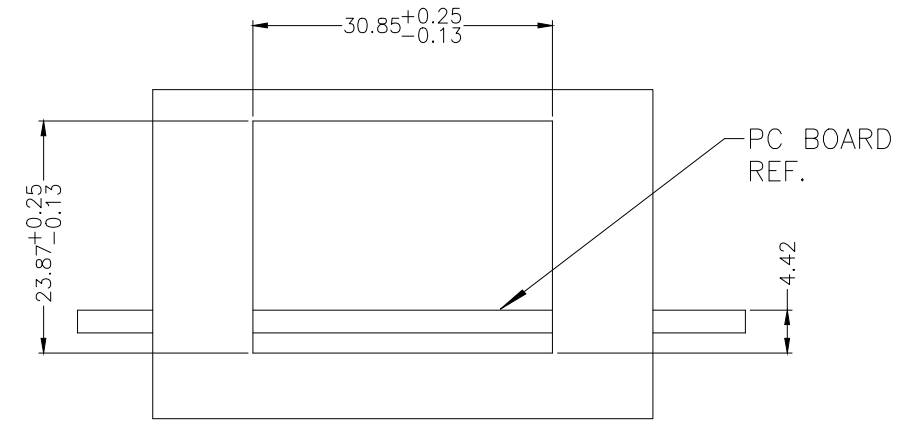
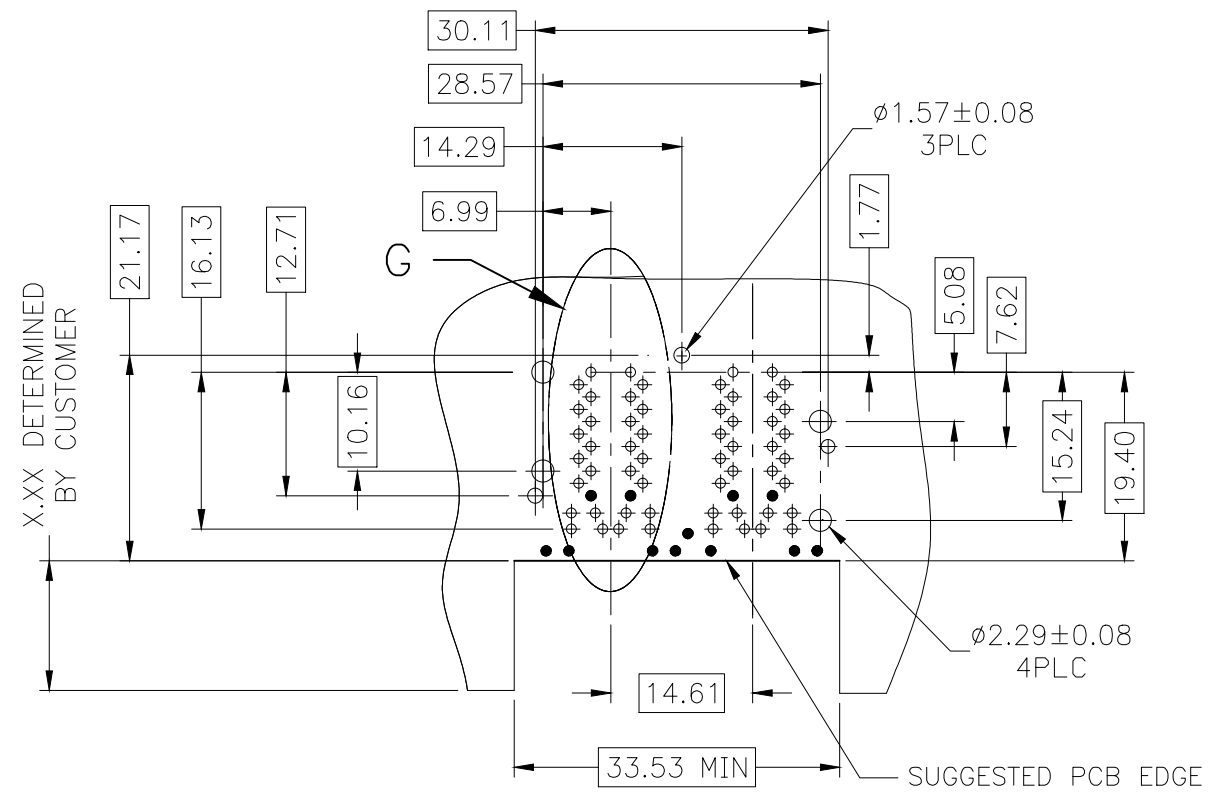
| REVISIONS | | | | |
|-----------|-----|-------------|------|----|
| # | LNK | DESCRIPTION | DATE | BY |
| - | - | SEE SHEET 1 | - | - |



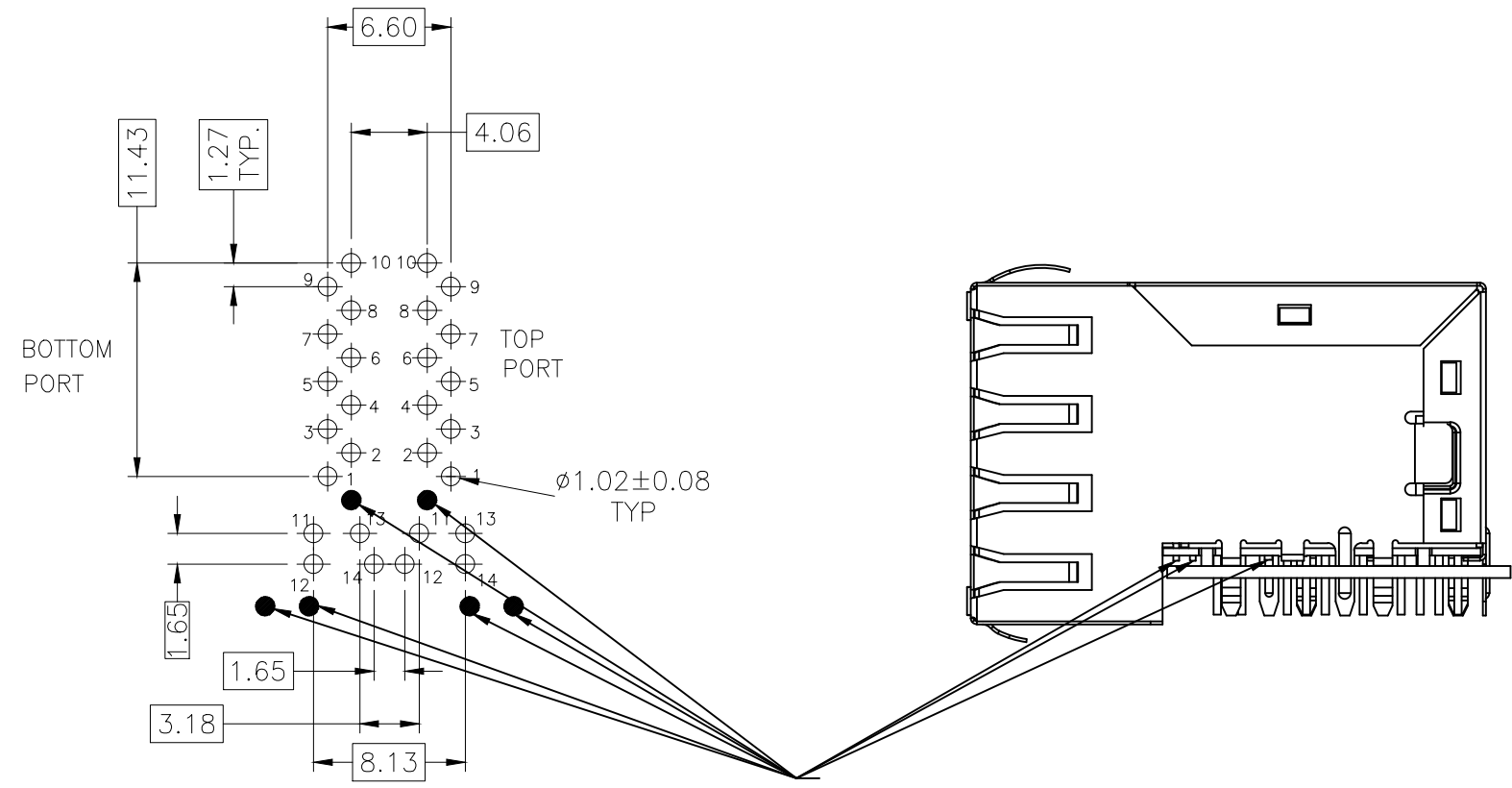
| | | | |
|--|-----------|----------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DATE: 30AAL2007 | DRW: DALE PAN |
| DIMENSIONS: mm | | CHK: KEITH ZHU | 30AAL2007 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | APD: TEDDY XIONG | 30AAL2007 |
| 0 PLC | ± 0.25 | PRODUCT SPEC | NAME: 2X2 MAG45(TM) MODULAR JACK, OFFSET |
| 1 PLC | ± 0.25 | APPLICATION SPEC | SBC16 GIGABIT CIRCUIT, W/ LED'S |
| 2 PLC | ± 0.25 | SIZE: A1 | SHIELDED WAVE PANEL GROUND TABS |
| 3 PLC | ± 0.25 | CAGE CODE: C=1840214 | RESTRICTED TO |
| 4 PLC | ± 0.25 | SCALE: 1:1 | |
| ANGLES | ± | SHEET: 2 OF 4 | |
| FINISH | - | REV: D | |
| MATERIAL: - | WEIGHT: - | CUSTOMER DRAWING | |



| REVISIONS | | | | |
|-----------|----|-------------|------|----------|
| # | LR | DESCRIPTION | DATE | DR / APD |
| - | - | SEE SHEET 1 | - | - |



RECOMMENDED PC BOARD LAYOUT VIEW FROM COMPONENT SIDE

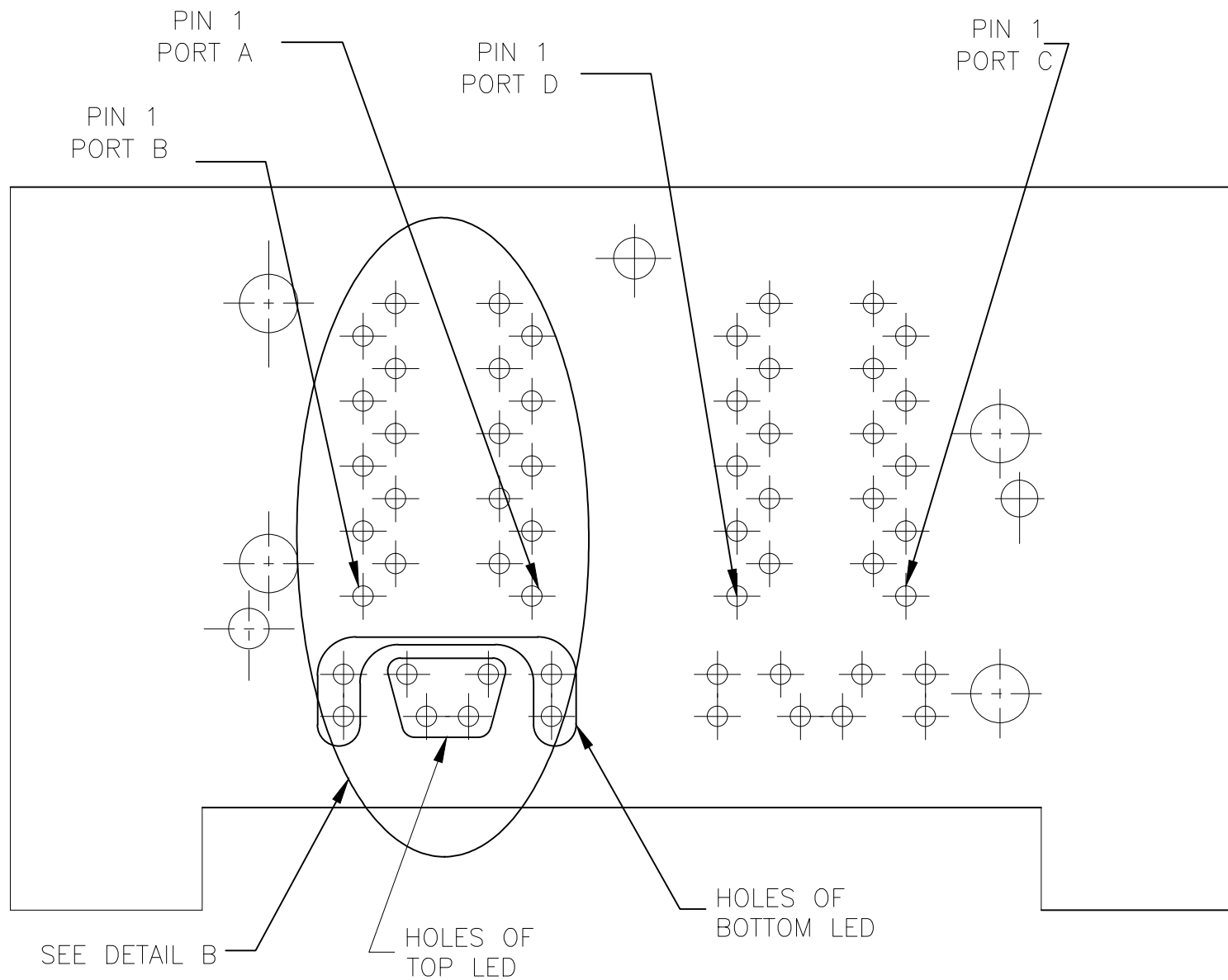


PIN 0#, BOTTOM LED'S PIN ON MOD JACK AND BOTTOM PCB ARE STUB PINS WITH LENGTH SIMILAR TO PCB STANDOFF HEIGHT PRECAUTIONS SHOULD BE TAKEN IN PCB DESIGN TO GUARD AGAINST SHORTING TRACES TO STUB PINS

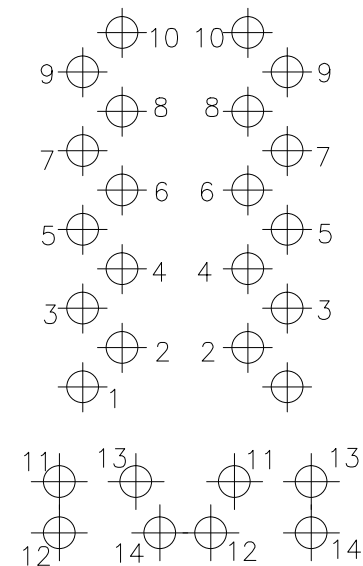
DETAIL G
SCALE: 2:1

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|----------------------------|-------------------------------------|--------|-------|--------|-------|--------|-------|--------|--|------|---|------------------|---|------|----|------------|---------|---|-----------|---|--------|---|------------------|---|--|---------------|---|-------|-----|-------|--------|-----|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DR: DALE PAN 30JUL2007 | TRP connector Dongguan China | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DIMENSIONS: mm | | CR: KEITH ZHU 30JUL2007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | APD: TEDDY XIONG 30JUL2007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>0 PLC</td><td>± 0.25</td></tr> <tr><td>1 PLC</td><td>± 0.25</td></tr> <tr><td>2 PLC</td><td>± 0.25</td></tr> <tr><td>3 PLC</td><td>± 0.25</td></tr> <tr><td>4 PLC</td><td>± 0.25</td></tr> </table> | 0 PLC | ± 0.25 | 1 PLC | ± 0.25 | 2 PLC | ± 0.25 | 3 PLC | ± 0.25 | 4 PLC | ± 0.25 | <table border="1"> <tr><td>NAME</td><td>2X2 MAG45(TM) MODULAR JACK, OFFSET S8G16 GIGABIT CIRCUIT, W/ LED'S SHIELDED, WAVE PANEL GROUND TABS</td></tr> <tr><td>APPLICATION SPEC</td><td>-</td></tr> <tr><td>SIZE</td><td>A1</td></tr> <tr><td>DRAWING NO</td><td>1840214</td></tr> </table> | NAME | 2X2 MAG45(TM) MODULAR JACK, OFFSET S8G16 GIGABIT CIRCUIT, W/ LED'S SHIELDED, WAVE PANEL GROUND TABS | APPLICATION SPEC | - | SIZE | A1 | DRAWING NO | 1840214 | <table border="1"> <tr><td>DATE CODE</td><td>-</td></tr> <tr><td>WEIGHT</td><td>-</td></tr> <tr><td>CUSTOMER DRAWING</td><td>-</td></tr> </table> | DATE CODE | - | WEIGHT | - | CUSTOMER DRAWING | - | <table border="1"> <tr><td>RESTRICTED TO</td><td>-</td></tr> <tr><td>SCALE</td><td>1:1</td></tr> <tr><td>SHEET</td><td>3 OF 4</td></tr> <tr><td>REV</td><td>D</td></tr> </table> | RESTRICTED TO | - | SCALE | 1:1 | SHEET | 3 OF 4 | REV | D |
| 0 PLC | ± 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLC | ± 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLC | ± 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 PLC | ± 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 PLC | ± 0.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME | 2X2 MAG45(TM) MODULAR JACK, OFFSET S8G16 GIGABIT CIRCUIT, W/ LED'S SHIELDED, WAVE PANEL GROUND TABS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| APPLICATION SPEC | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SIZE | A1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWING NO | 1840214 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE CODE | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WEIGHT | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CUSTOMER DRAWING | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RESTRICTED TO | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SCALE | 1:1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SHEET | 3 OF 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REV | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

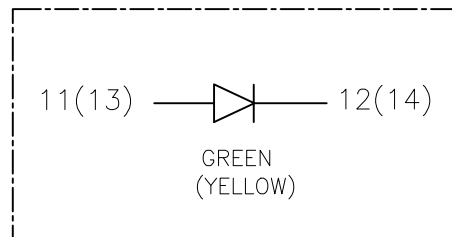
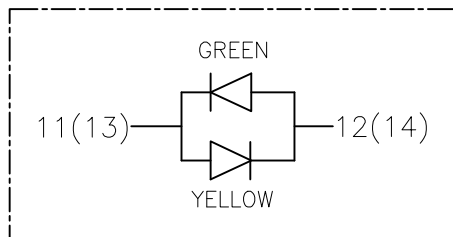
| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| # | LNK | DESCRIPTION | DATE | DRW APPD |
| - | - | SEE SHEET 1 | - | - |



LED HOLE DESIGNATIONS VIEWED FROM COMPONENT SIDE



DETAIL B



| | | | | |
|--|--------------|-----------------------------|--|-----------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DRW: DALE PAN 30JUL2007 | TRP connector Dongguan China | |
| DIMENSIONS: mm | | CHK: KEITH ZHU 30JUL2007 | | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | APPD: TEDDY XIONG 30JUL2007 | | |
| 0 PLC ± 0.25 | 1 PLC ± 0.25 | PRODUCT SPEC | NAME: 2X2 MAG45(TM) MODULAR JACK, OFFSET | |
| 2 PLC ± 0.25 | 3 PLC ± 0.25 | APPLICATION SPEC | S8G16 GIGABIT CIRCUIT, W/ LED'S | |
| 4 PLC ± 0.25 | ANGLES ± | MATERIAL | SIZE: A1 | DRAWING NO: C=1840214 |
| FINISH | | WEIGHT | SCALE: 1:1 | SHEET 4 OF 4 |
| CUSTOMER DRAWING | | REV D | | |