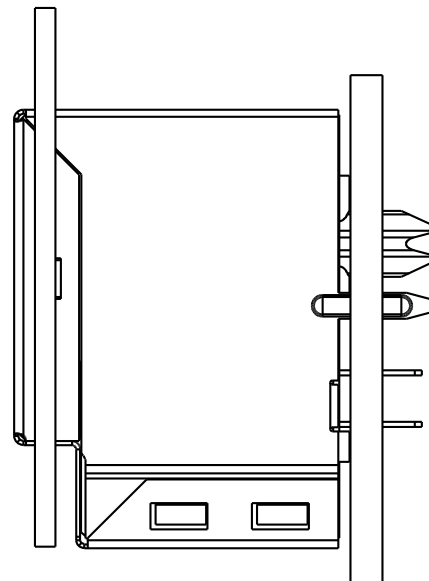
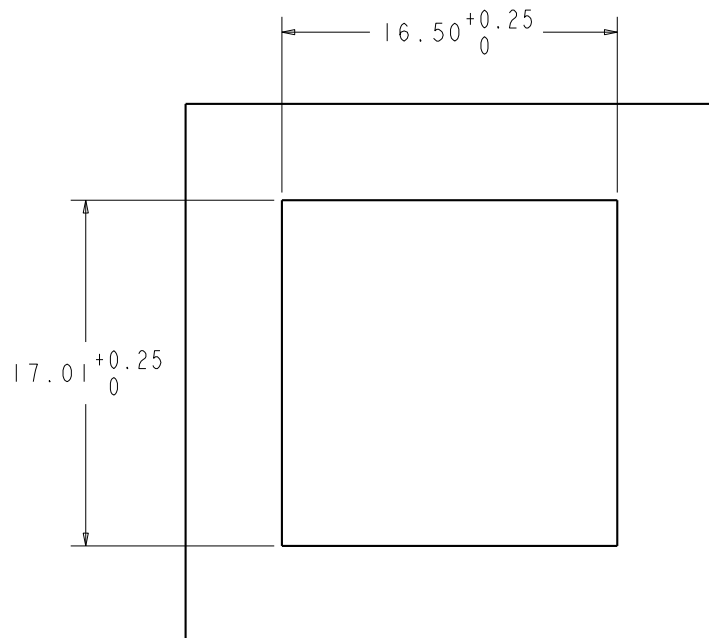
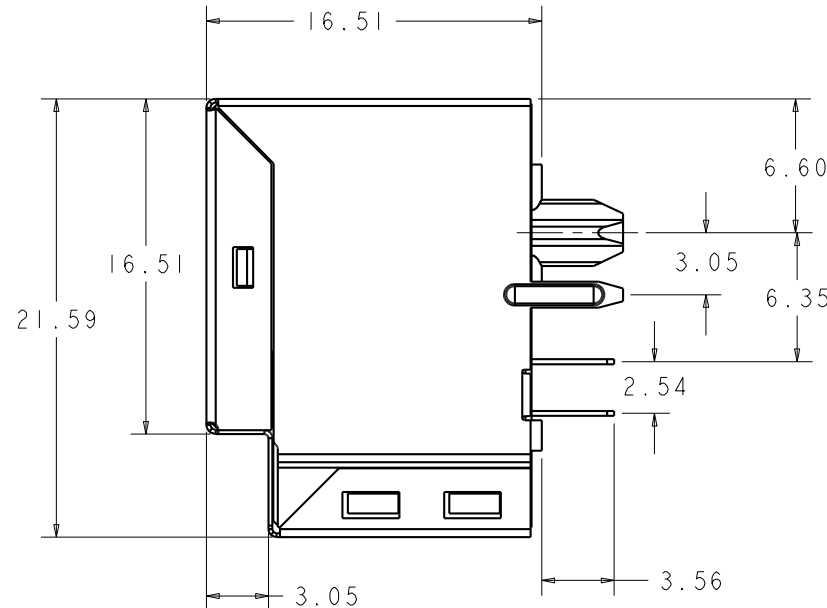
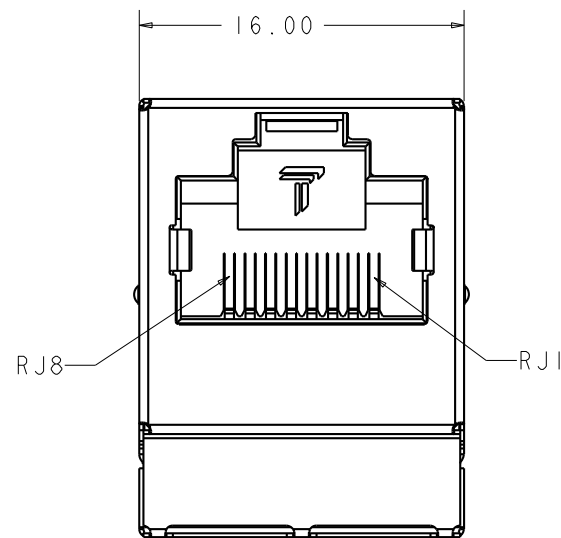
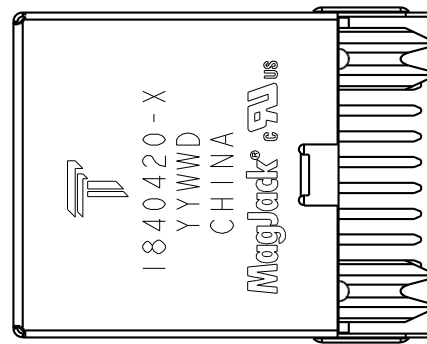
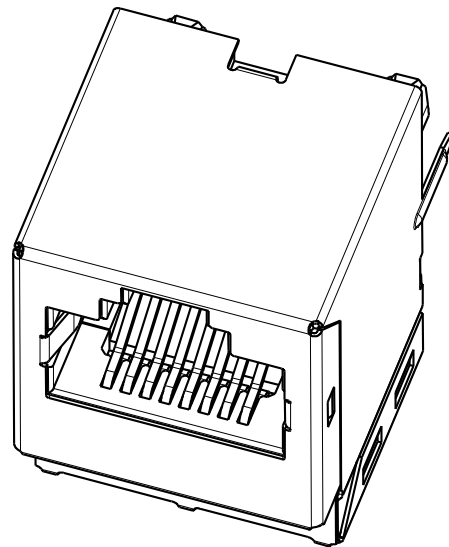


THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
5736910 5939955 6425781 6428361 6554638 6840817 7123117  
7429195 7717749 7808751 6217391 6149050 7924130

# REVISIONS

| P | LTR | DESCRIPTION             | DATE      | DWN | APVD |
|---|-----|-------------------------|-----------|-----|------|
| F |     | EC-1411035, LOGO CHANGE | 22DEC2014 | PP  | KZ   |



## 1. MATERIALS

HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATED UL 94V-0  
SHIELD: BRASS, 0.20mm THICK,  
PREPLATED WITH MIN 0.76um SEMI-BRIGHT NICKEL  
POST DIPPED WITH 2.54um MIN SAC SOLDER AT GROUND PINS.  
CONTACT: PHOSPHOR BRONZE,  
WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND  
SELECTIVE 1.27um MIN GOLD PLATING AT MATING INTERFACE  
SOLDER TAIL: PHOSPHOR BRONZE,  
WITH 1.27um MIN OVERALL NICKEL UNDERPLATE AND  
PLATED WITH 2.54um MIN TIN  
LED: DIFFUSED EPOXY LENS, 0.50mm SQUARE CARBON STEEL WIREFRAME LEADS  
PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL  
OVER 1.02um MIN COPPER UNDERPLATE POST PLATED WITH 2.54um MIN TIN



## MAGNETICS

-APPLICATION: 10/100 BASE-T  
-IMPEDANCE: 100 OHMS  
-TURNS RATIO (CHIP:CABLE): TX = 1:1, RX = 1:1  
-OPEN CIRCUIT INDUCTANCE (OCL): 350uH 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  
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 23.5.1.1, ITEM b



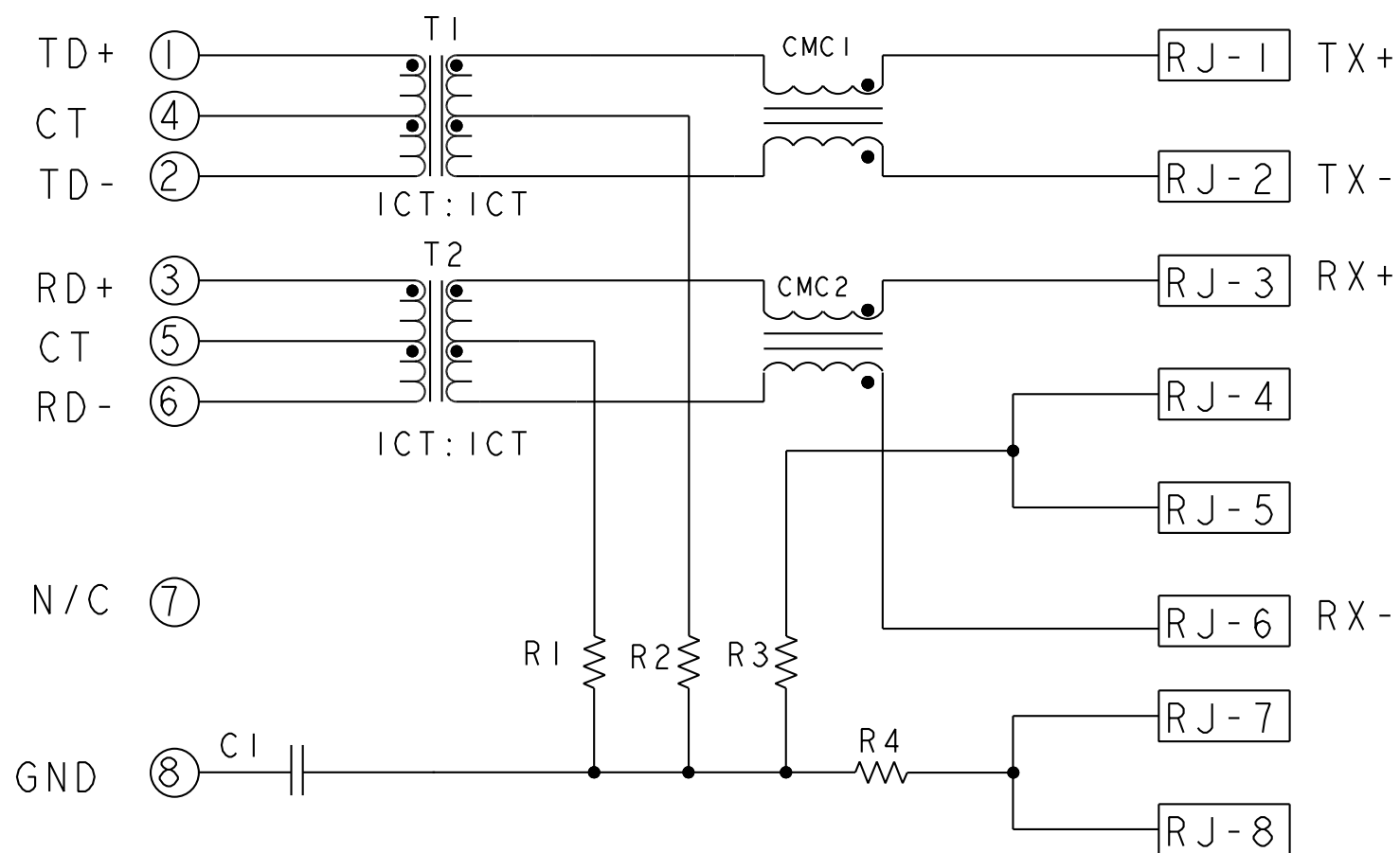
THE MAGNETIC ARE SYMMETRICAL AND SUPPORT AUTO-MDIX OPERATION.

- OPERATING TEMPERATURE: 0 ~ 70°C
- ALL DIMENSIONS TO BE NOMINAL UNLESS OTHERWISE NOTED
- RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.

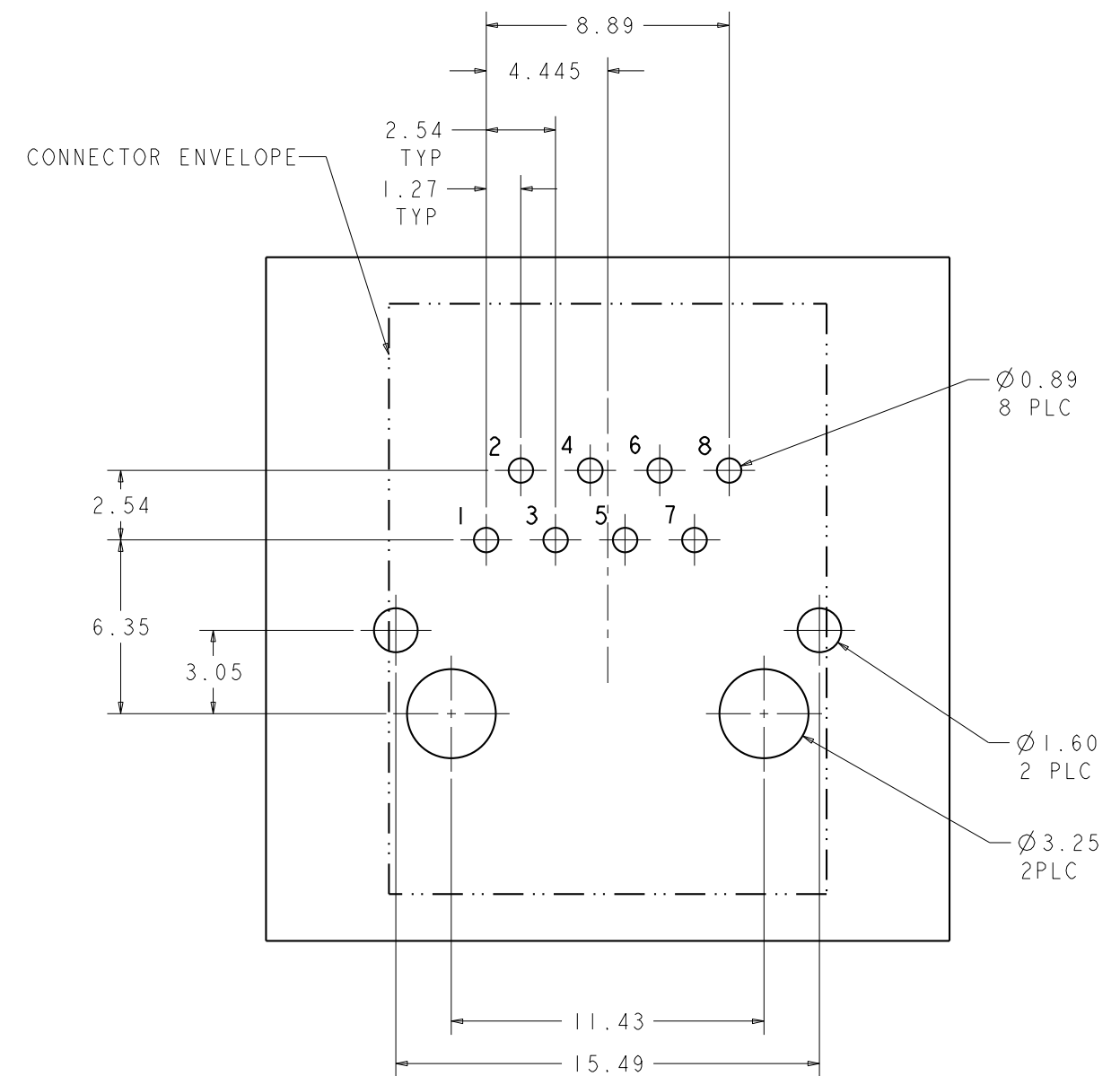
1840420-1  
PART NUMBER

|                                                                                                          |  |                                         |                                                                                                                           |              |                        |          |
|----------------------------------------------------------------------------------------------------------|--|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------|------------------------|----------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                                                   |  | DWN<br>TOMMY REN<br>18AUG2006           |  <b>trp</b> CONNECTOR<br>a bel group |              | DONGGUAN<br>CHINA      |          |
| DIMENSIONS:<br>mm                                                                                        |  | CHK<br>KEITH ZHU<br>18AUG2006           |                                                                                                                           |              |                        |          |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                                                                   |  | APVD<br>TEDDY XIONG<br>18AUG2006        | DESC<br>IXI, MAGJACK, VERTICAL<br>426P13, 10/100 CIRCUIT, W/O LEDS                                                        |              | RESTRICTED TO          |          |
| 0 PLC ±0.25<br>1 PLC ±0.25<br>2 PLC ±0.25<br>3 PLC ±0.25<br>4 PLC ±0.25<br>ANGLES ±°<br>APPLICATION SPEC |  | MODEL NAME<br>MAGJACK<br>SINGLE NON-PoE |                                                                                                                           | SIZE<br>A2   | CAGE CODE<br>C-1840420 | REV<br>F |
| PRODUCT SPEC<br>108-2100                                                                                 |  | CUSTOMER DRAWING                        |                                                                                                                           | SCALE<br>NTS | SHEET<br>1 OF 2        | REV<br>F |

# 426P13 10/100 BASE-T CIRCUIT<sup>2/3</sup>



C1 = 1000pF, 2KV, CAPACITOR  
R1 - R4 = 75 ohms, RESISTOR



SUGGESTED PCB LAYOUT (TOL: ±0.05)  
(COMPONENT SIDE VIEW)

|                                                                                       |  |                                                 |                                                                                                                           |           |                                                            |                    |
|---------------------------------------------------------------------------------------|--|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------|--------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                                |  | DWN<br>TOMMY REN<br>18AUG2006                   |  <b>trp</b> CONNECTOR<br>a bel group |           | DONGGUAN<br>CHINA                                          |                    |
| DIMENSIONS:<br>mm                                                                     |  | CHK<br>KEITH ZHU<br>18AUG2006                   |                                                                                                                           |           |                                                            |                    |
| TOLERANCES UNLESS<br>OTHERWISE SPECIFIED:                                             |  | APVD<br>TEDDY XIONG<br>18AUG2006                | DESC                                                                                                                      |           | IXI, MAGJACK, VERTICAL<br>426PI3, 10/100 CIRCUIT, W/O LEDS |                    |
|  |  | MODEL NAME<br><br>MAGJACK<br><br>SINGLE NON-POE | SIZE<br>A2                                                                                                                | CAGE CODE | DRAWING NO<br>C=1840420                                    | RESTRICTED TO<br>- |
| PRODUCT SPEC<br><br>108-2100                                                          |  | APPLICATION SPEC<br><br>-                       | CUSTOMER DRAWING                                                                                                          |           | SCALE<br>NTS                                               | SHEET<br>2 OF 2    |
|                                                                                       |  |                                                 |                                                                                                                           |           |                                                            | REV<br>F           |