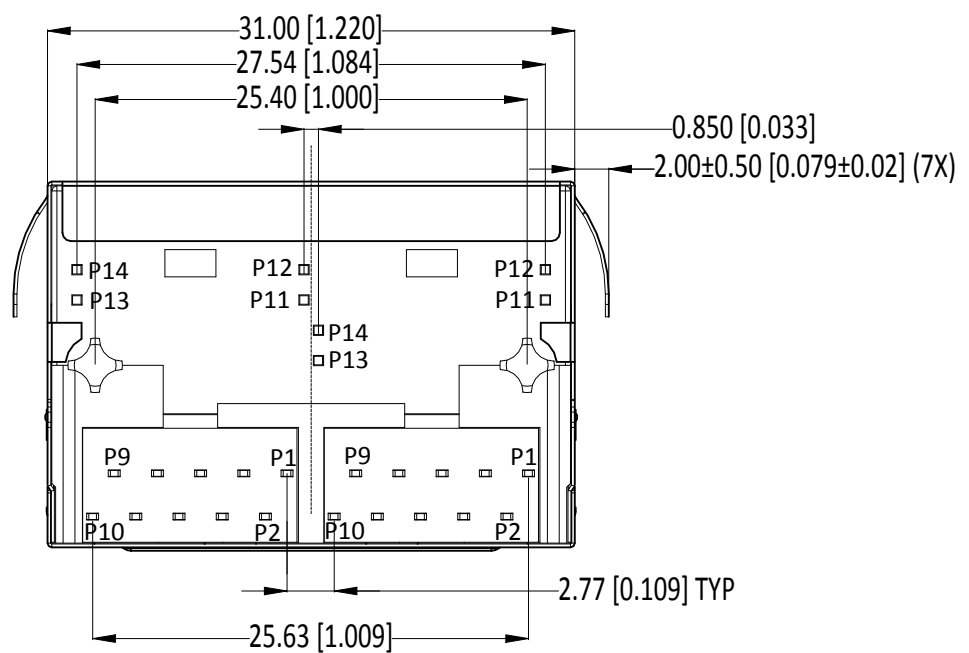
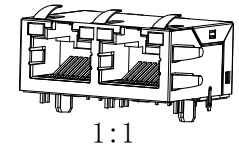
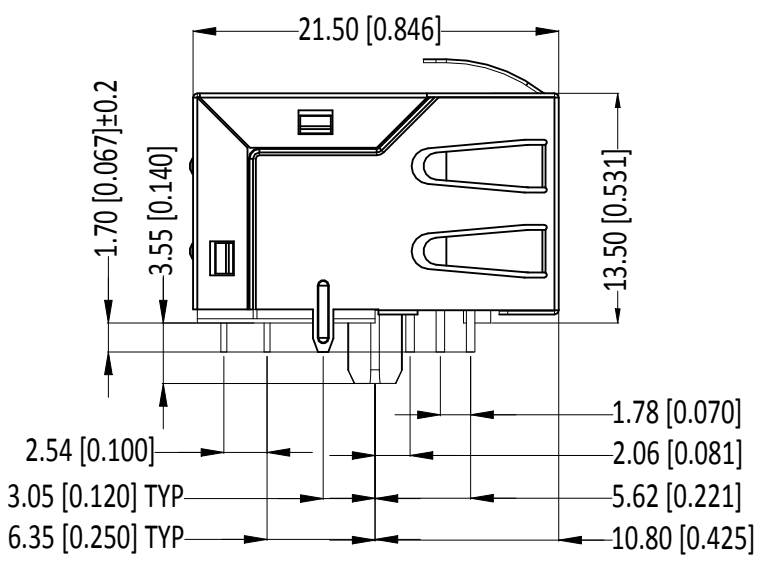
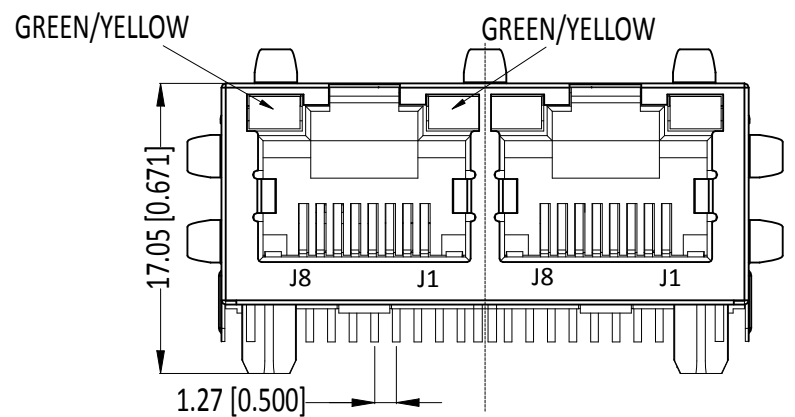


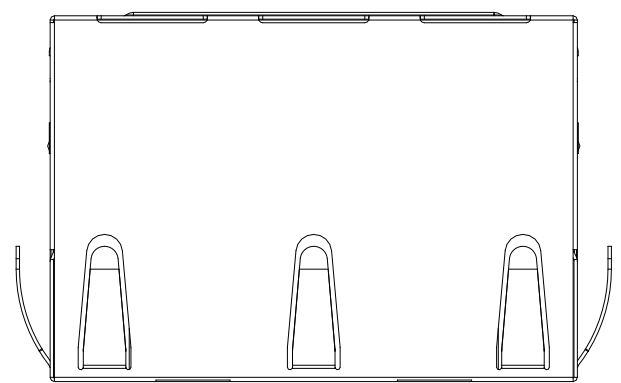
| REVISIONS |     |                                     |           |       |
|-----------|-----|-------------------------------------|-----------|-------|
| P         | LTR | DESCRIPTION                         | DATE      | APVD  |
|           | C2  | RETURN LOSS SPECIFICATION CORRECTED | 26MAY2021 | SS OW |



- 1 CONNECTOR MATERIAL:  
 HOUSING: LCP BLACK UL94 V-0  
 INSERT: LCP BLACK UL94 V-0  
 SHIELD: BRASS  
 SHIELD PLATING: NICKEL  
 CONTACT: COPPER ALLOY  
 CONTACT PLATING: SELECTIVE GOLD, MIN. 0.76µm (30µinch) IN CONTACT AREA  
 OVER MIN. 1.27µm (50µinch) NICKEL  
 SOLDER PIN PLATING: 3.05µm (120µinch) TIN OVER 1.27µm (50µinch) NICKEL  
 OVER ALL  
 SHIELDING PIN PLATING: NICKEL
- 2 PIN NOT ELECTRICALLY CONNECTED MAYBE OMITTED SEE ELECTRICAL CIRCUIT DIAGRAM FOR OMITTED PINS
- 3 RJ45 CAVITY DIMENSION CONFORM TO FCC PART 68
- 4 THE PART IS RECOMMENDED FOR REFLOW SOLDERING PROCESS PEAK SOLDERING: TEMPERATURE MAX. +260°C, MAX. 10s
- 5 OPERATING TEMPERATURE: T= -40°C TO +85°C
- 6 STORAGE TEMPERATURE: T= -40°C TO +85°C
- 7 UNLESS OTHERWISE SPECIFIED, SEE TABLE FOR ALL DIMENSIONS TOLERANCES
- 8 JACK CONFIGURATION: 1 x 2  
 TAB DIRECTION: UP
- 9 AUTOMATED PLACEMENT: FOR FORCE-FREE ASSEMBLY WITHOUT THE ALIGNMENT FUNCTION WIDEN TO MIN. 3.40 mm DIAMETER
- 10 PACKAGING: REEL (T+R) ACCORDING TO PACKAGING SPECIFICATION 107-18116



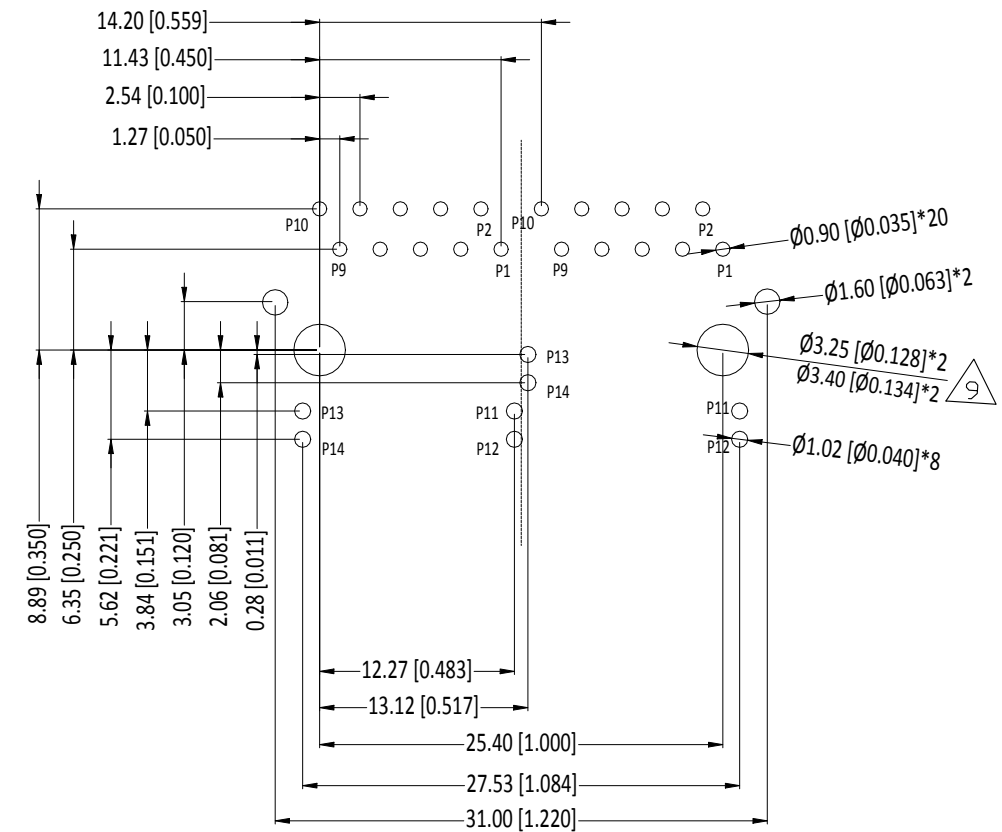
| TABLE OF TOLERANCE (mm) |           |
|-------------------------|-----------|
| RANGE                   | TOLERANCE |
| 0-10                    | ±0.15     |
| >10-40                  | ±0.25     |
| >40-70                  | ±0.30     |
| >70                     | ±0.40     |



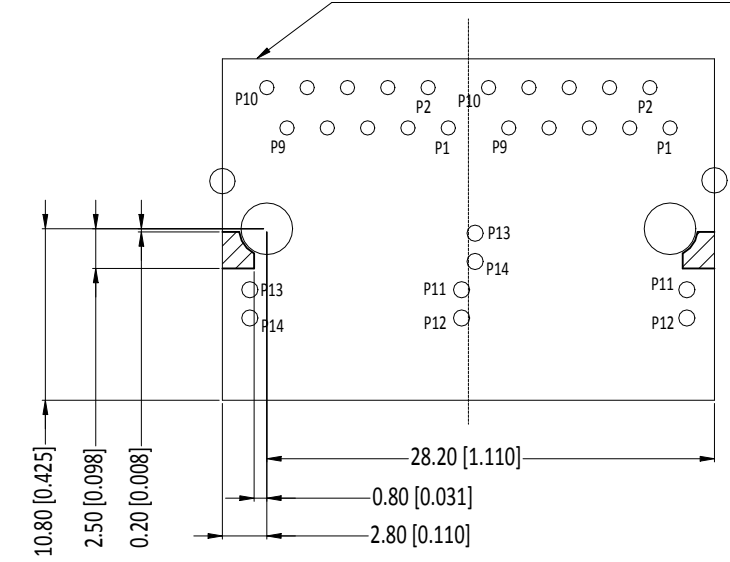
|   |  |                              |  |                                     |                 |
|---|--|------------------------------|--|-------------------------------------|-----------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                      |  | DWN GANESH C M 12SEP2016     |  | TE Connectivity Ltd.                |                 |
| DIMENSIONS: mm [INCHES]   |  | CHK MARTIN SZELAG 12SEP2016  |  |                                     |                 |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                                      |  | APVD FRANZ MUELLER 12SEP2016 |  | NAME                                |                 |
| 0 PLC ± -<br>1 PLC ± -<br>2 PLC ± -<br>3 PLC ± -<br>4 PLC ± -<br>ANGLES ± - |  | PRODUCT SPEC<br>108-94552    |  | RJ45 JACK INT.MAG. 1Gb LED 1x2 INV. |                 |
| MATERIAL 1  |  | FINISH 1                     |  | APPLICATION SPEC<br>114-94447       |                 |
|   |  | WEIGHT -                     |  | SIZE A3                             | CAGE CODE 00779 |
|   |  | CUSTOMER DRAWING             |  | DRAWING NO C-2301996-7              | RESTRICTED TO - |
|   |  | SCALE 3:1                    |  | SHEET 1 OF 3                        | REV C2          |

| P | LTR | DESCRIPTION | DATE | DWN | APVD |
|---|-----|-------------|------|-----|------|
| - | -   | SEE SHEET 1 | -    | -   | -    |

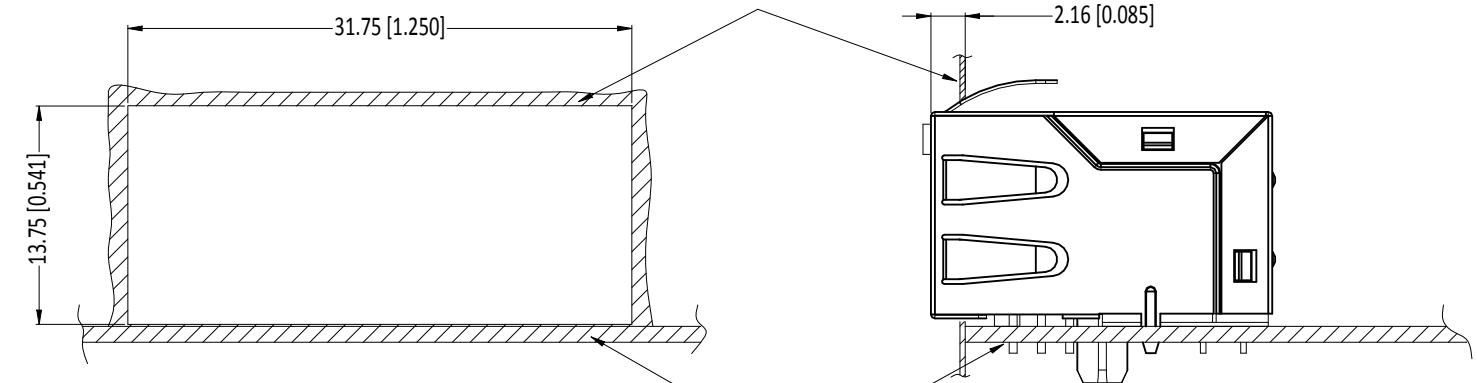
SUGGESTED PCB LAYOUT



Connector Boundary



METAL PANEL



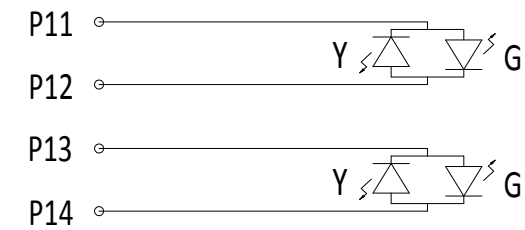
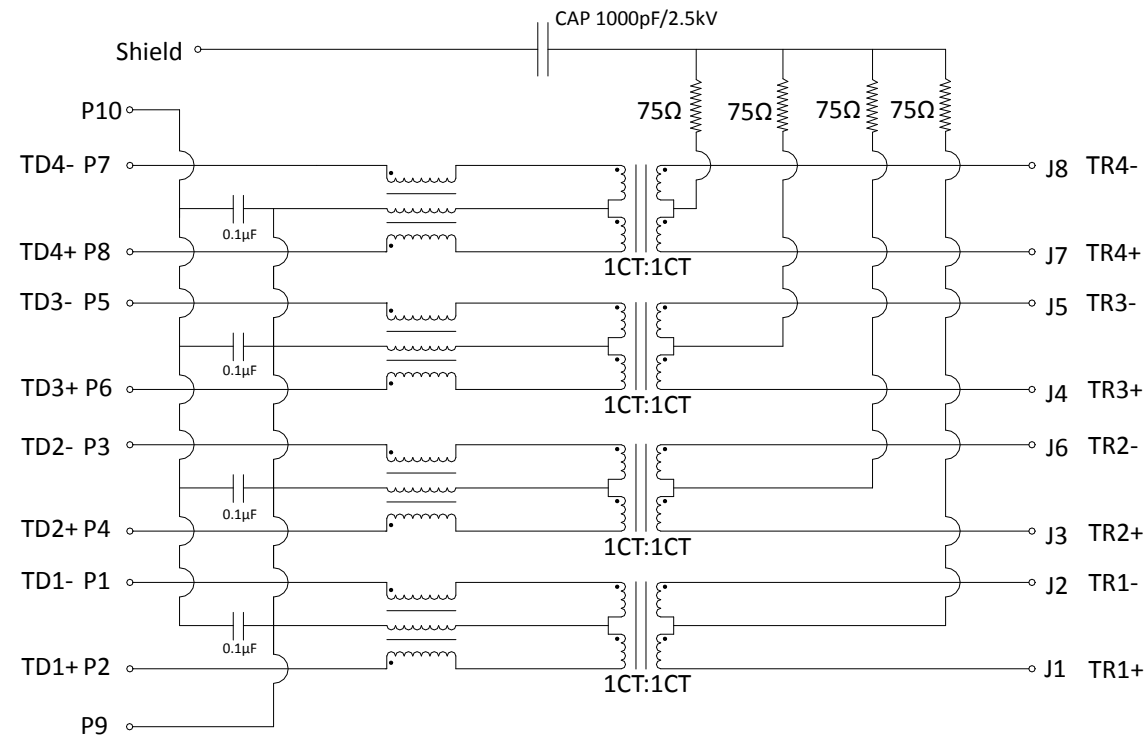
PCB

UNIT: mm / inch  
TOLERANCES: ±0.10 / 0.004  
ONLY FOR THIS VIEW

|   |  |                                    |                           |                    |                           |
|---|--|------------------------------------|---------------------------|--------------------|---------------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                      |  | DWN<br>GANESH C M<br>12SEP2016     | TE Connectivity Ltd.      |                    |                           |
| DIMENSIONS:<br>mm [INCHES]  |  | CHK<br>MARTIN SZELAG<br>12SEP2016  |                           |                    |                           |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                                      |  | APVD<br>FRANZ MUELLER<br>12SEP2016 | PRODUCT SPEC<br>108-94552 |                    |                           |
| 0 PLC ± -<br>1 PLC ± -<br>2 PLC ± -<br>3 PLC ± -<br>4 PLC ± -<br>ANGLES ± - |  | APPLICATION SPEC<br>114-94447      | SIZE<br>A3                | CAGE CODE<br>00779 | DRAWING NO<br>C-2301996-7 |
| MATERIAL<br>  |  | FINISH<br>                         | WEIGHT<br>-               | RESTRICTED TO<br>- |                           |
| CUSTOMER DRAWING  |  |                                    | SCALE<br>3:1              | SHEET<br>2 OF 3    | REV<br>C2                 |

| P | LTR | DESCRIPTION | DATE | DWN | APVD |
|---|-----|-------------|------|-----|------|
| - | -   | SEE SHEET 1 | -    | -   | -    |

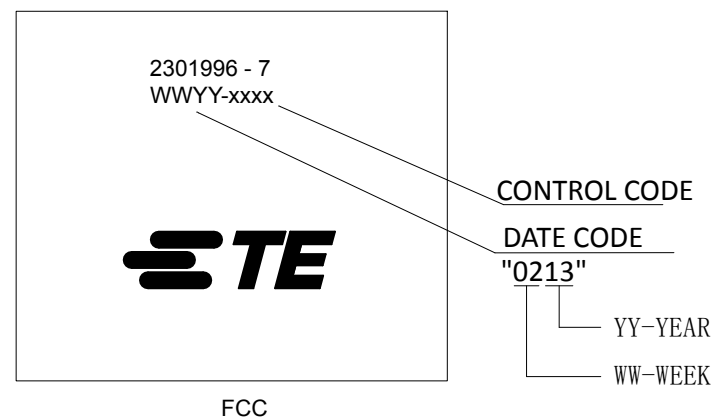
**ELECTRICAL CIRCUIT DIAGRAM**



| PIN | YELLOW | GREEN | PIN | YELLOW | GREEN |
|-----|--------|-------|-----|--------|-------|
| P11 | -      | +     | P13 | -      | +     |
| P12 | +      | -     | P14 | +      | -     |

VF = 2.2 V (max. 2.5 V) @IF = 20 mA

- TURN RATIO @100kHz: (P2~P1):(J1~J2) = 1:1±2%  
(P4~P3):(J3~J6) = 1:1±2%  
(P6~P5):(J4~J5) = 1:1±2%  
(P8~P7):(J7~J8) = 1:1±2%
- PRIMARY INDUCTANCE: 350μH MIN @100kHz,0.1V 8mA DC BIAS
- DC RESISTANCE: 1.2 OHMS MAX.
- INSERTION LOSS: 1-100MHz -1.0dB MAX.  
100-125MHz -1.2dB MAX.
- RETURN LOSS: 1-40MHz -16dB MIN.  
40-100MHz -10dB+20log(f/80MHz) MIN.
- CROSS TALK: 1-100MHz -30dB MIN.
- COMMON TO COMMON MODE ATTENUATION: 1-100MHz -30dB MIN.
- ISOLATION: PHY SIDE TO LINE SIDE: 2250VDC



|   |  |                                    |   |                    |                           |
|---|--|------------------------------------|---|--------------------|---------------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT.                                      |  | DWN<br>GANESH C M<br>12SEP2016     | TE Connectivity Ltd.                        |                    |                           |
| DIMENSIONS:<br>mm [INCHES]  |  | CHK<br>MARTIN SZELAG<br>12SEP2016  |   |                    |                           |
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                                      |  | APVD<br>FRANZ MUELLER<br>12SEP2016 | NAME<br>RJ45 JACK INT.MAG. 1Gb LED 1x2 INV. |                    |                           |
| 0 PLC ± -<br>1 PLC ± -<br>2 PLC ± -<br>3 PLC ± -<br>4 PLC ± -<br>ANGLES ± - |  | PRODUCT SPEC<br>108-94552          | SIZE<br>A3                                  |                    |                           |
| MATERIAL<br>1   |  | FINISH<br>1                        | APPLICATION SPEC<br>114-94447               | CAGE CODE<br>00779 | DRAWING NO<br>C-2301996-7 |
| CUSTOMER DRAWING  |  |                                    | WEIGHT<br>-                                 | RESTRICTED TO<br>- | SCALE<br>3:1              |
|   |  |                                    | SHEET<br>3 OF 3                             |                    | REV<br>C2                 |