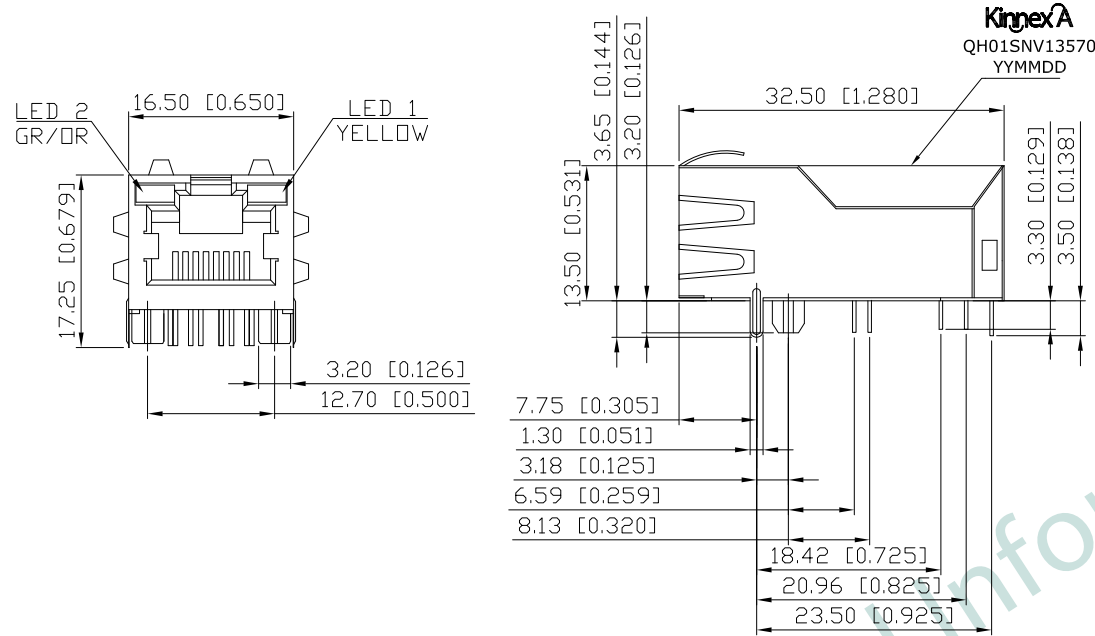


1. MECHANICAL DIMENSIONS :

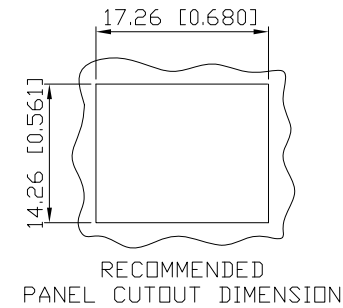
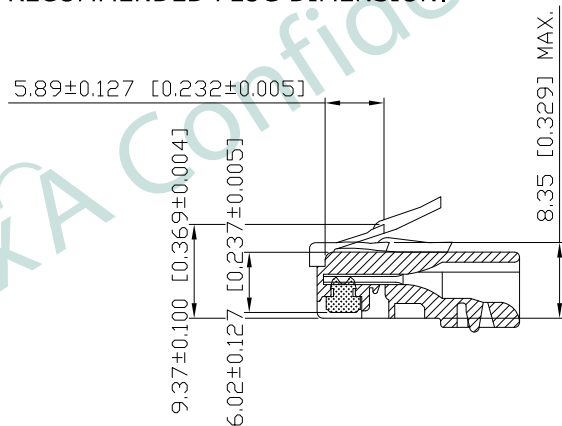
| REV. | DATE         | DESCRIPTION |
|------|--------------|-------------|
| 01   | Jan. 17, '18 | 1st RELEASE |
|      |              |             |
|      |              |             |

NOTES:

- MATERIAL:  
HOUSING: HIGH THERMOPLASTIC, UL94V-0, COLOR-BLACK  
CONTACTS: T=0.35mm PHOS-BRONZE,  
6u" GOLD PLATING ON CONTACT AREA,  
NICKEL UNDERPLATING OVERALL  
SHIELD: COPPER ALLOY, NICKEL PLATING
- OPERATING TEMPERATURE: 0°C~+70°C
- INSERTION FORCE: 4 POUNDS MAX.  
EXTRACTION FORCE: 4 POUNDS MAX.
- DURABILITY: 750 MATING CYCLED MIN.
- CAVITY CONFORMS TO FCC RULES AND REGULATIONS PART 68,  
SUBPART F.
- UNSPECIFIED TOLERANCE: .XX ±0.25[0.010]  
.X ±0.30[0.012]

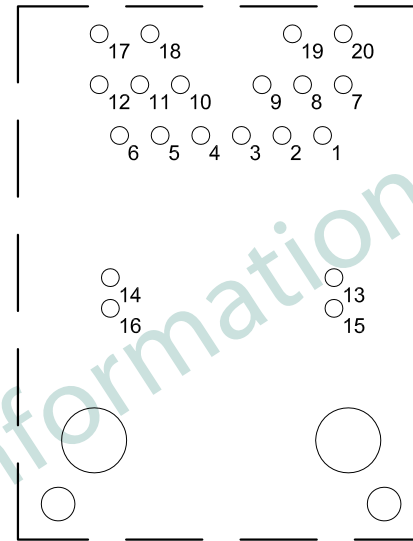
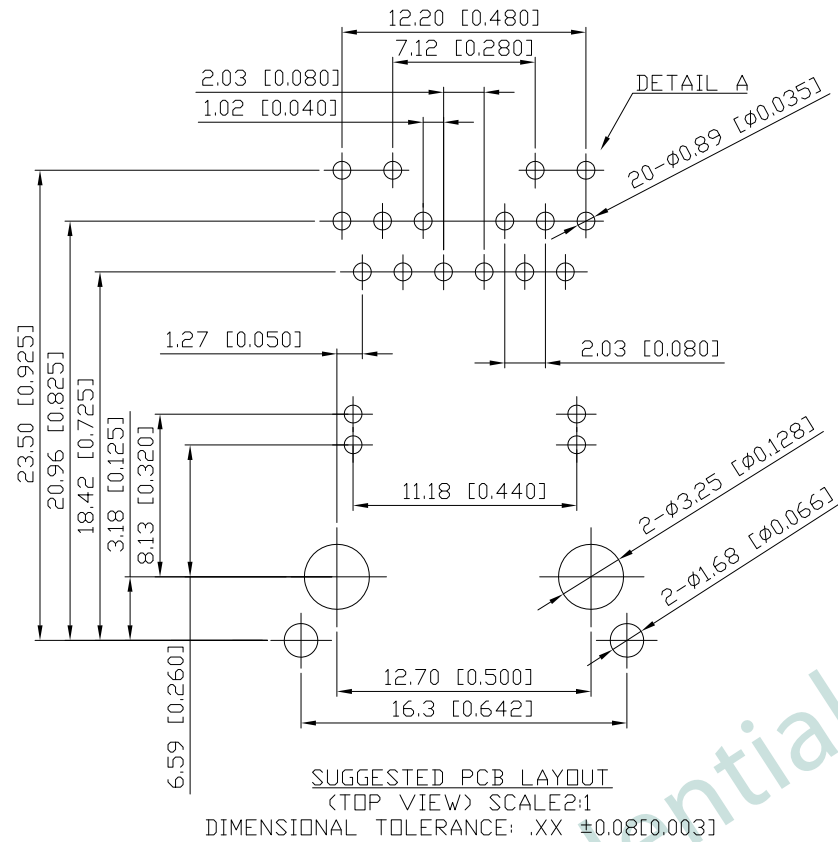


RECOMMENDED PLUG DIMENSION:



| PART NO  |  | KQH-01S-N-V13-570 |              |        |
|----------|--|-------------------|--------------|--------|
| TITLE    | RJ45, W/1G TRANSFORMER AND PoE+, W/LED, SHIELDED |                   |              |        |
| REV : 01 |  |                   |              |        |
| UNIT     | DRAWN  | CHKD              | DATE         | SHEET  |
| mm[inch] | CINDY  | DANIEL            | Jan. 17, '18 | 1 of 5 |

2. PCB LAYOUT :



DETAIL A

| P#  | DEFINITION |
|-----|------------|
| P1  | CT         |
| P2  | MD<2>-     |
| P3  | MD<2>+     |
| P4  | MD<1>+     |
| P5  | MD<1>-     |
| P6  | CT         |
| P7  | CT         |
| P8  | MD<3>+     |
| P9  | MD<3>-     |
| P10 | MD<0>-     |
| P11 | MD<0>+     |
| P12 | CT         |
| P13 | VC+        |
| P14 | VC-        |
| P15 | VC+        |
| P16 | VC-        |
| P17 | LEFT GR+   |
| P18 | LEFT DR+   |
| P19 | RIGHT YE+  |
| P20 | RIGHT YE-  |

KQH-01S-N-V13-570

PRODUCT SERIES  
KQH: LATCH UP FOR PoE+ TYPE

MECHANICAL TYPE  
01S: KQH 1 PORT,  
LENGTH=32.5mm  
LED COLOR OPTION

CIRCUIT TYPE

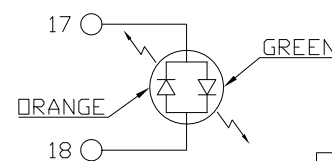
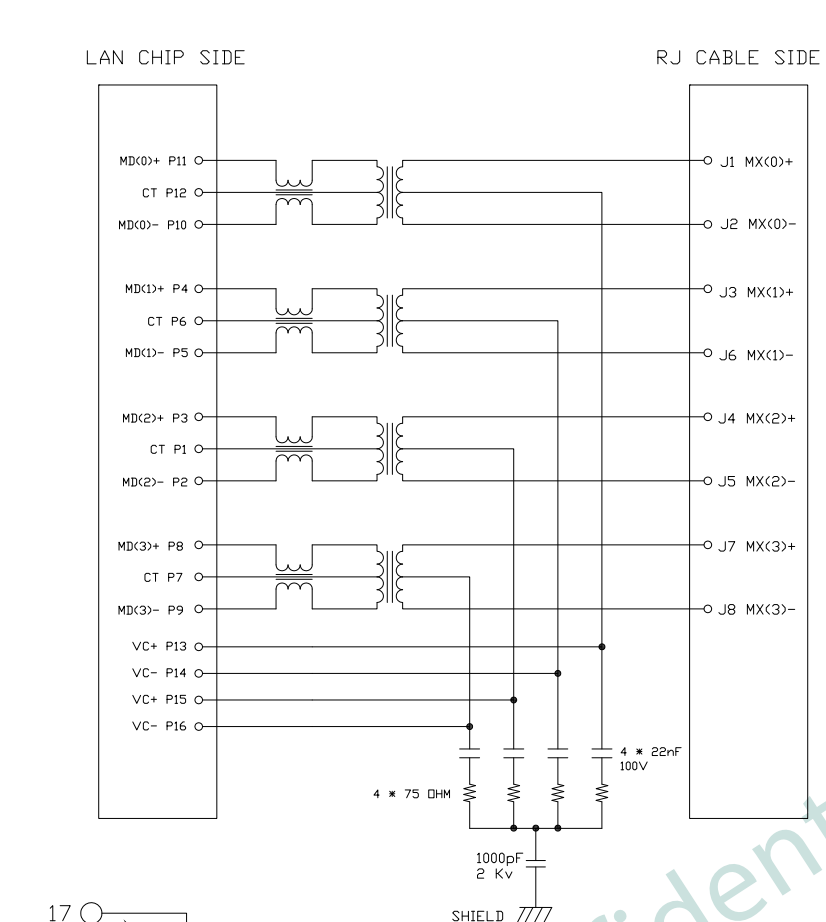
SPECIAL CODE  
0: STANDARD

SHIELDED TYPE  
7: EMI FINGER ON ALL SIDE

LED POLARITY  
5: BI-COLOR, +-

| PART NO  |  | KQH-01S-N-V13-570 |              |        |
|----------|--|-------------------|--------------|--------|
| TITLE    | RJ45, W/1G TRANSFORMER AND PoE+, W/LED, SHIELDED |                   |              |        |
| REV : 01 |  |                   |              |        |
| UNIT     | DRAWN  | CHKD              | DATE         | SHEET  |
| mm[inch] | CINDY  | DANIEL            | Jan. 17, '18 | 2 of 5 |

### 3. SCHEMATIC :



| COLOR  | VF(V)<br>@20mA |     | IV(mcd)<br>@20mA |     | PEAK WAVE LENGTH λP(nm)<br>@20mA |
|--------|----------------|-----|------------------|-----|----------------------------------|
|        | TYP            | MAX | TYP              | TYP |                                  |
| GREEN  | 2.2            | 2.6 | 8                | 20  | 570                              |
| ORANGE | 2.0            | 2.6 | 10               | 20  | 606                              |
| YELLOW | 2.2            | 2.6 | 15               | 20  | 588                              |

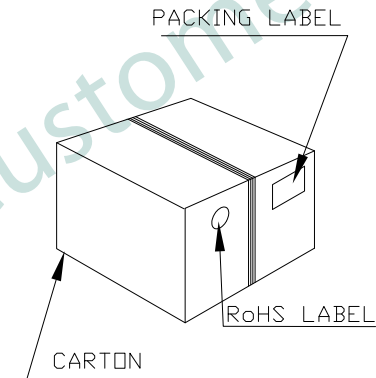
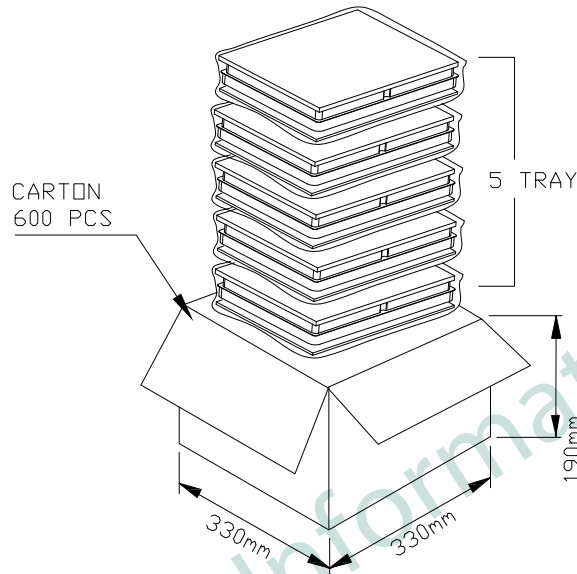
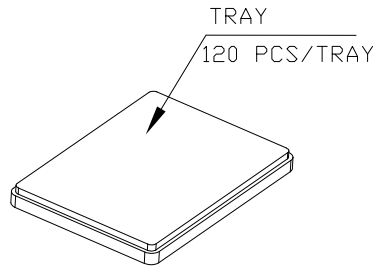
### 4. ELECTRICAL CHARACTERISTICS :

TEST NOTES:(25±5°C)

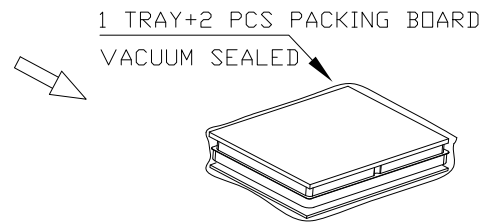
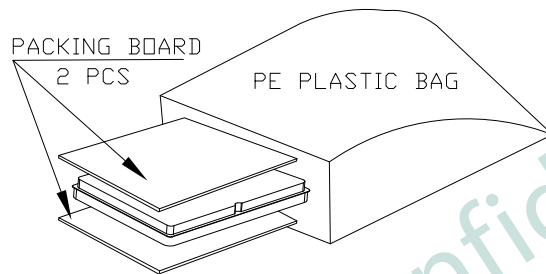
- 1.TR:  
INPUT TO OUTPUT=1:1±3%
- 2.LX:(100KHz,100mV,8mA, DC Bias)  
350uH MINIMUM
- 3.DCR:  
EVERY RJ PAIR=1.2 Ω MAXIMUM
- 4.HIPDT:  
INPUT TO OUTPUT PIN: 1500 VAC/60SEC
- 5.INSERTION LOSS:  
-0.8dB MAXIMUM AT 0.3MHz TO 100MHz  
-1.2dB MAXIMUM AT 100MHz TO 125MHz
- 6.RETURN LOSS:  
-20dB MINIMUM AT 1MHz TO 10MHz  
-16dB MINIMUM AT 30MHz  
-12dB MINIMUM AT 60MHz TO 100MHz
- 7.CROSS TALK:  
-40dB MINIMUM AT 1MHz TO 10MHz  
-35dB MINIMUM AT 30MHz TO 60MHz  
-30dB MINIMUM AT 60MHz TO 100MHz
- 8.COMMON TO COMMON MODE REJECTION:  
-30dB MINIMUM AT 300KHz TO 100MHz
9. WORKING CURRENT FOR PoE+: 720mA DC MAX.

|          |  |                   |              |        |
|----------|--|-------------------|--------------|--------|
| PART NO  |  | KQH-01S-N-V13-570 |              |        |
| TITLE    | RJ45, W/1G TRANSFORMER AND PoE+, W/LED, SHIELDED |                   |              |        |
| REV : 01 |  |                   |              |        |
| UNIT     | DRAWN  | CHKD              | DATE         | SHEET  |
| mm[inch] | CINDY  | DANIEL            | Jan. 17, '18 | 3 of 5 |

5. PACKING SPECIFICATION:

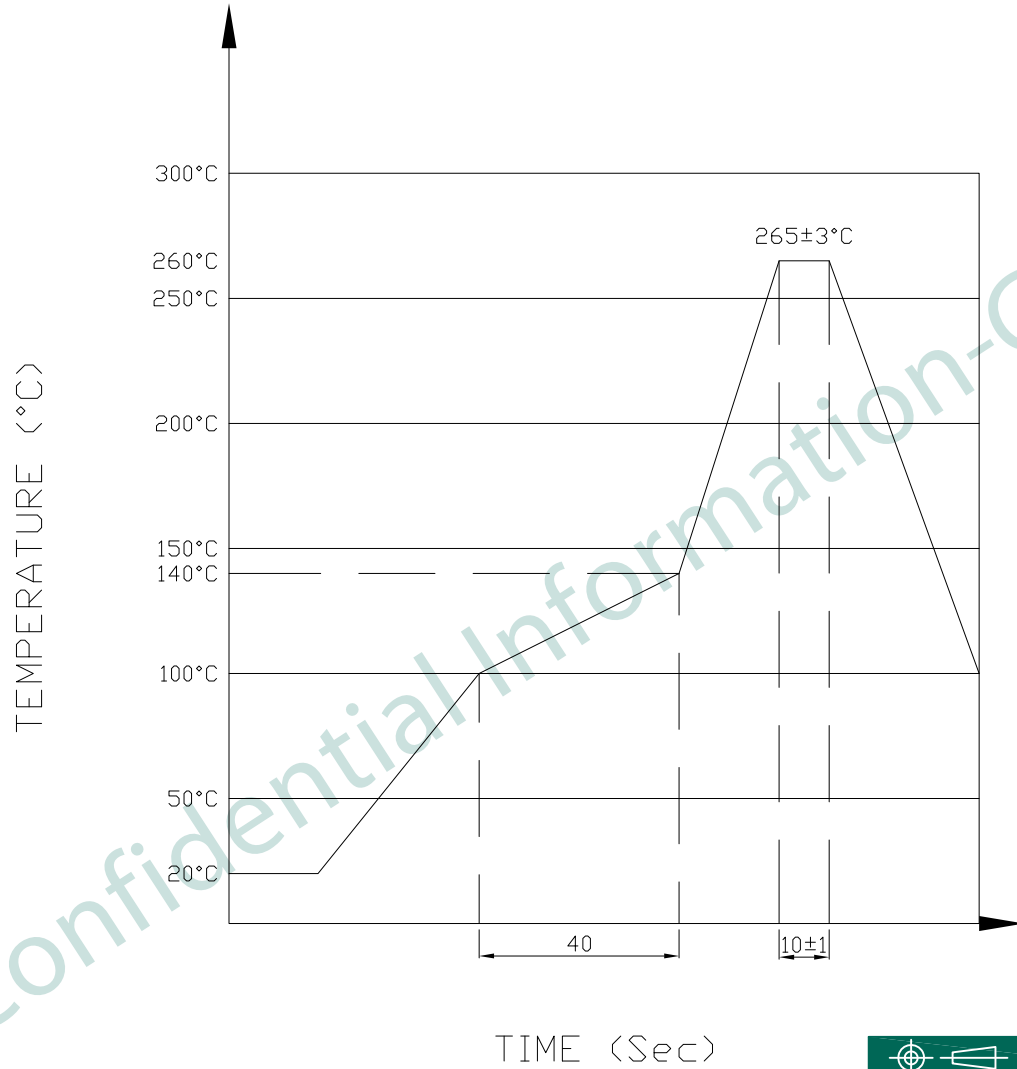


1 PCS: N.W.-9g  
 1 CTN: N.W.-5.4Kg(600PCS)  
 1 CTN: G.W.-6.8Kg  
 SIZE: 330x330x190(mm)



|                                  |   |             |              |              |
|----------------------------------|---|-------------|--------------|--------------|
| <b>PART NO</b> KQH-01S-N-V13-570 |   |             |              |              |
| <b>TITLE</b>                     | RJ45, W/1G TRANSFORMER AND PoE+,<br>W/LED, SHIELDED |             |              |              |
| REV : 01                         |   |             |              |              |
| <b>UNIT</b>                      | <b>DRAWN</b>  | <b>CHKD</b> | <b>DATE</b>  | <b>SHEET</b> |
| mm[inch]                         | CINDY   | DANIEL      | Jan. 17, '18 | 4 of 5       |

6. PROFILE OF WAVE SOLDER :



The measuring point for the specified temperature shall be on the soldered part of the lead

|                           |  |        |              |        |
|---------------------------|--|--------|--------------|--------|
| PART NO KQH-01S-N-V13-570 |  |        |              |        |
| TITLE                     | RJ45, W/1G TRANSFORMER AND PoE+, W/LED, SHIELDED |        |              |        |
| REV : 01                  |  |        |              |        |
| UNIT                      | DRAWN  | CHKD   | DATE         | SHEET  |
| mm[inch]                  | CINDY  | DANIEL | Jan. 17, '18 | 5 of 5 |