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RoHS
2002/96/EC



ELECTRICAL CHARACTERISTICS @ 25°C

TRANSFORMER RATIO

| | |
|-----|---------------|
| TP1 | 1CT : 1CT ±2% |
| TP2 | 1CT : 1CT ±2% |
| TP3 | 1CT : 1CT ±2% |
| TP4 | 1CT : 1CT ±2% |

DC L @ 100kHz, 100mVRMS

8mA DC BIAS 350 uH MIN.

INS. LOSS

100kHz TO 100MHz -1.1 dB MAX

RET. LOSS (MIN)

1MHz-30MHz -18 dB

30MHz-60MHz -16 dB

60MHz-80MHz -14 dB

80MHz-100MHz -12 dB

CM TO CM REJ

100kHz - 100MHz -25 dB TYP

CROSS TALK

1MHz - 60MHz -35 dB TYP

60MHz - 100MHz -25 dB TYP

HIPOT (Isolation Voltage):

1500 Vrms

LEAKAGE INDUCTANCE

PRIMARY W/ SECONDARY SHORTED 0.3uH Max. @ 1MHz

INTERWINDING CAPACITANCE

PER CHANNEL (PRI. TO SEC.) 50pF Max @ 1MHz

DC RESISTANCE

(21-15)=(16-23)=(24-18)=(19-26) 1.2 ohms Max

(RJ1-RJ2)=(RJ3-RJ6)=(RJ4-RJ5)=(RJ7-RJ8) 1.2 ohms Max

LED 1 IF=20mA GREEN 2.2V TYP.

IF=20mA GREEN 565nm TYP.

LED 2 IF=20mA GREEN 2.2V TYP.

IF=20mA GREEN 565nm TYP.

IF=20mA GREEN 565nm TYP.

IF=20mA GREEN 565nm TYP.

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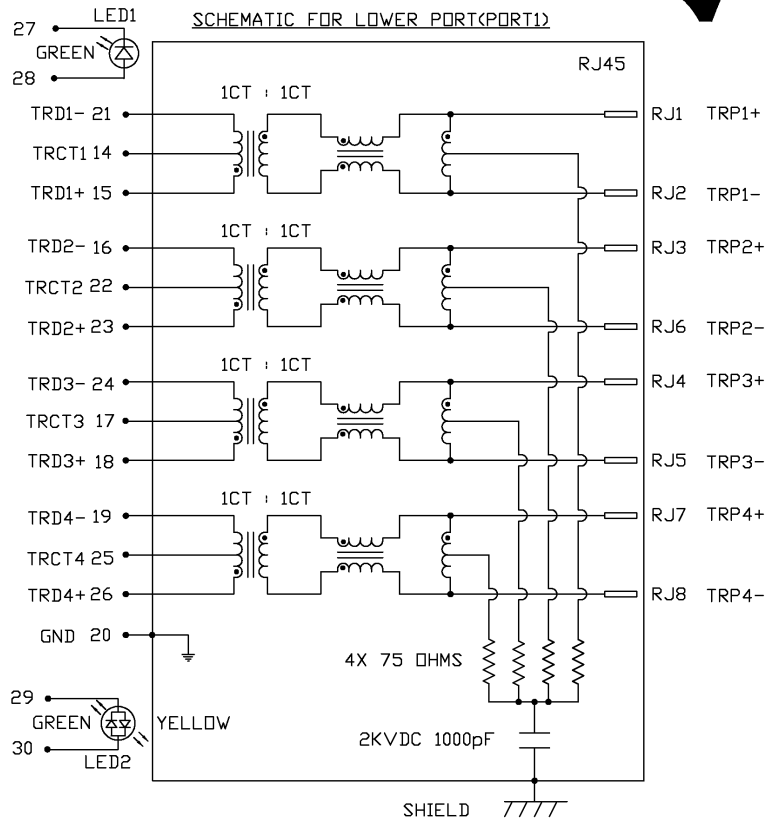
IF=20mA GREEN 565nm TYP.

IF=20mA GREEN 565nm TYP.

IF=20mA GREEN 565nm TYP.

IF=20mA GREEN 565nm TYP.

| LED1 POLARITY | | | LED2 POLARITY | | |
|---------------|--------|-------|---------------|--------|--------|
| PIN 27 | PIN 28 | COLOR | PIN 29 | PIN 30 | COLOR |
| - | + | GREEN | + | - | YELLOW |
| | | | - | + | GREEN |



| ORIGINATED BY | DATE | TITLE | PART NO. / DRAWING NO. | STANDARD DIM. | [] METRIC DIM. AS REFERENCE |
|---------------|----------|------------------------------------|------------------------|---------------|------------------------------|
| CHUNG | 12-14-05 | 2X1 gigabit MagJack® (with LED) | 0845-2R1T-E4 | TOL. IN INCH | UNIT : INCH [mm] |
| DRAWN BY | DATE | | FILE NAME | .X | SCALE : N/A |
| DE | 12-14-05 | | 08452R1TE4D.DWG | .XX | SIZE : A4 |
| | | | | .XXX | PAGE : 2 |

bel
COMPONENTS ARE A
CONNECTED
PLANE

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RoHS
2002/95/EC



ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

| | |
|-----|---------------|
| TP1 | 1CT : 1CT ±2% |
| TP2 | 1CT : 1CT ±2% |
| TP3 | 1CT : 1CT ±2% |
| TP4 | 1CT : 1CT ±2% |

DCL @ 100kHz,100mVRMS

8mA DC BIAS 350 uH MIN.

INS. LOSS

100KHz TO 100MHz -1.1 dB MAX

RET. LOSS (MIN)

1MHz-30MHz -18 dB

30MHz-60MHz -16 dB

60MHz-80MHz -14 dB

80MHz-100MHz -12 dB

CM TO CM REJ

100kHz - 100MHz -25 dB TYP

CROSS TALK

1MHz - 60MHz -35 dB TYP

60MHz - 100MHz -25 dB TYP

HIPOT (Isolation Voltage):

LEAKAGE INDUCTANCE 1500 Vrms

PRIMARY W/ SECONDARY SHORTED

0.3uH Max. @ 1MHz

INTERWINDING CAPACITANCE

PER CHANNEL (PRI. TO SEC.) 50pF Max @ 1MHz

DC RESISTANCE

(13-6)=(5-11)=(10-3)=(2-8) 1.2 ohms Max

(RJ1-RJ2)=(RJ3-RJ6)=(RJ4-RJ5)=(RJ7-RJ8) 1.2 ohms Max

LED 3 (Super bright)

VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.

λD (DOMINANT WAVELENGTH) IF=20mA GREEN 565nm TYP.

LED 4 (Super bright)

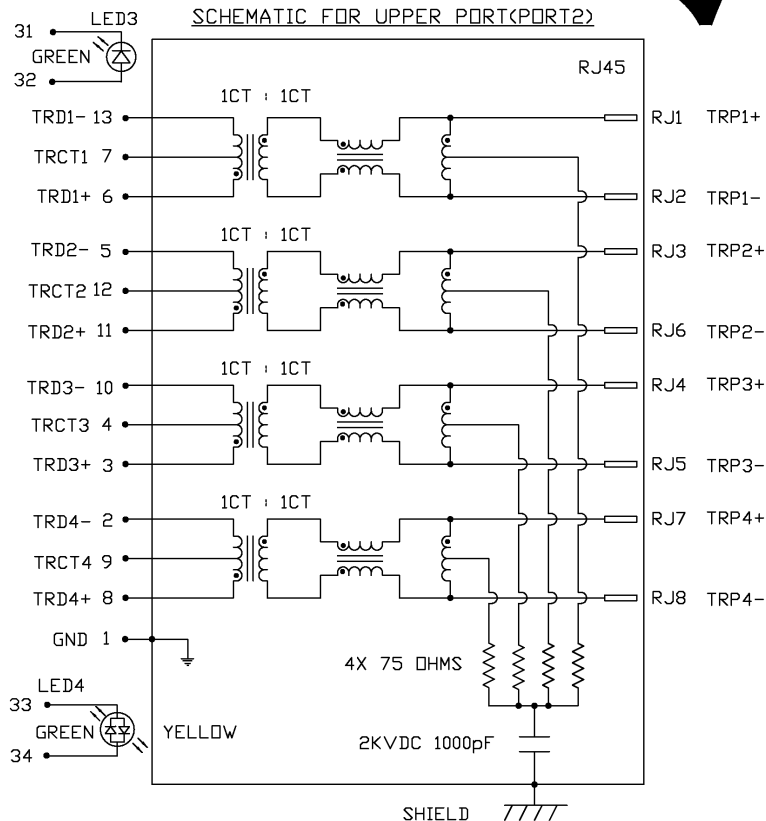
VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.

λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 2.1V TYP.

IF=20mA GREEN 565nm TYP.

IF=20mA YELLOW 590nm TYP.

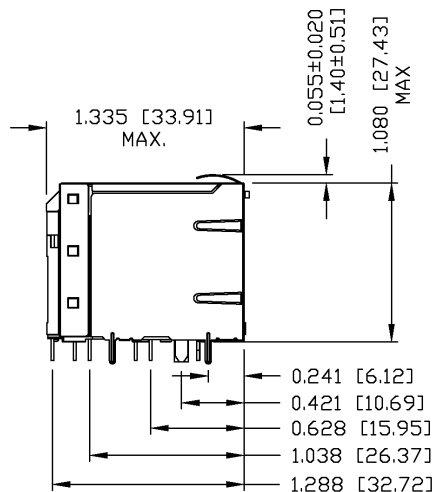
| LED3 POLARITY | | | LED4 POLARITY | | |
|---------------|--------|-------|---------------|--------|--------|
| PIN 31 | PIN 32 | COLOR | PIN 33 | PIN 34 | COLOR |
| - | + | GREEN | + | - | YELLOW |
| | | | - | + | GREEN |



| ORIGINATED BY | DATE | TITLE | PART NO. / DRAWING NO. | STANDARD DIM. | | [] METRIC DIM. AS REFERENCE | |
|---------------|----------|------------------------------------|------------------------|---------------|--|------------------------------|-----------|
| | | | | TOL. IN INCH | | UNIT : INCH [mm] | REV. : D |
| CHUNG | 12-14-05 | 2X1 gigabit MagJack® (with LED) | 0845-2R1T-E4 | .X | | SCALE : N/A | SIZE : A4 |
| DRAWN BY | DATE | | FILE NAME | .XX | | ⊕ | PAGE : 3 |
| DE | 12-14-05 | | 08452R1TE4D.DWG | .XXX | | | |

bel
COMPONENTS ARE A
CONNECTED
PLANE

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NOTES:

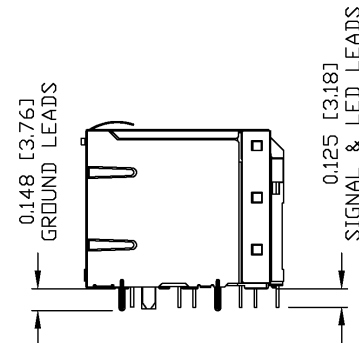
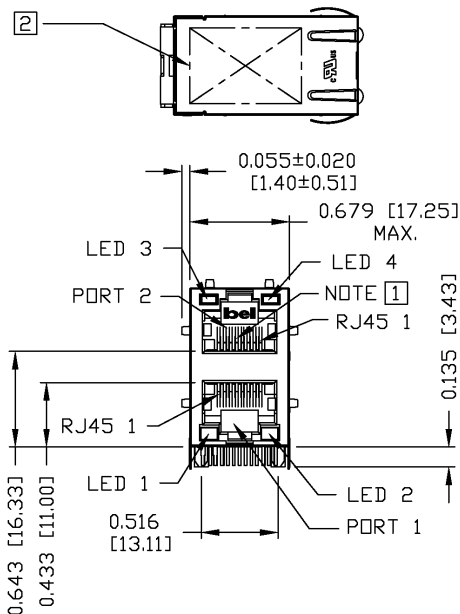
PLASTIC HOUSING: THERMOPLASTIC PBT
FLAMMABILITY RATING UL 94V-0
CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING
OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.
METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.
(ALL GROUND LEADS ARE SOLDER DIPPED)

RoHS COMPLIANCE, PER EU DIRECTIVE 2002/95/EC.

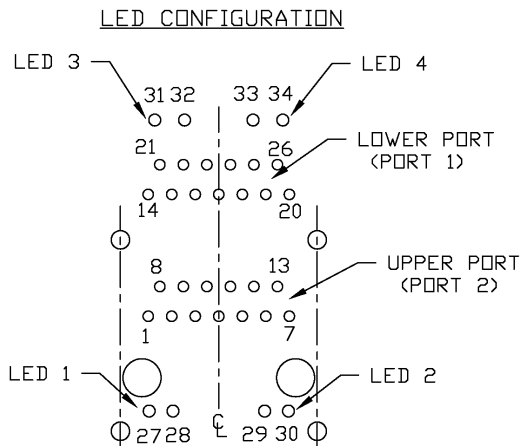
[1] JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.

[2] MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, AND DATE CODE.

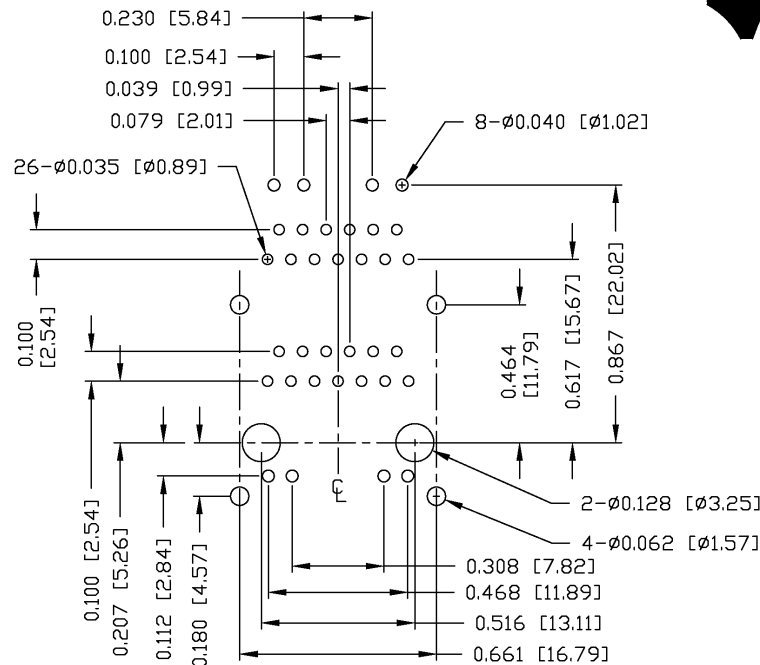
UL RECOGNIZED - FILE #E196366 AND E169987.



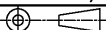
| ORIGINATED BY | DATE | TITLE | PART NO. / DRAWING NO. | STANDARD DIM. | | [] METRIC DIM. AS REFERENCE | | COMPONENTS FOR A CONNECTED PLANET |
|---------------|----------|------------------------------------|------------------------|---------------|--------|------------------------------|-----------|---|
| | | | | TOL. IN INCH | | UNIT : INCH [mm] | REV. : D | |
| BILL\KEUNG | 12-14-05 | 2X1 gigabit MagJack® (with LED) | 0845-2R1T-E4 | .X | | SCALE : N/A | SIZE : A4 | |
| DRAWN BY | DATE | | FILE NAME | .XX | | | PAGE : 4 | |
| QIN | 12-14-05 | | 08452R1TE4D.DWG | .XXX | ±0.010 | | | |

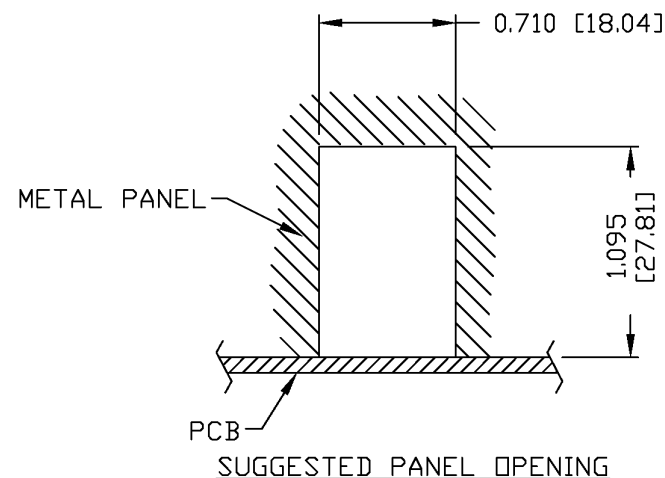
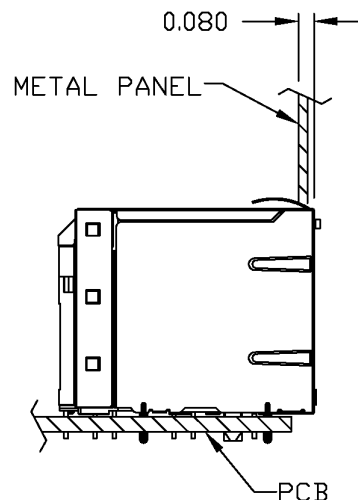


PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)
(SCALE 2:1)



SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)
(SCALE 2:1)

| | | | | | | | |
|-----------------------------|------------------|---|--|-------------------------------|--------|---|-----------|
| ORIGINATED BY BILL\KEUNG | DATE 12-14-05 | TITLE 2X1 gigabit MagJack® (with LED) | PART NO. / DRAWING NO. 0845-2R1T-E4 | STANDARD DIM. TOL. IN INCH | | [] METRIC DIM. AS REFERENCE | |
| | | | | .X | | UNIT : INCH [mm] | REV. : D |
| DRAWN BY QIN | DATE 12-14-05 | | FILE NAME 08452R1TE4D.DWG | .XX | | SCALE : N/A | SIZE : A4 |
| | | | | .XXX | ±0.004 |  | PAGE : 5 |



NOTE:




THE DISTANCE OF PANEL INSIDE SURFACE RELATIVE TO FRONT SURFACE OF PART IS ONLY A SUGGESTION.
 IN CASE THIS DISTANCE IS DIFFERENT, THE REQUIRED PANEL OPENING DIMENSIONS CHANGE ACCORDINGLY.

PACKING INFORMATION

PACKING TRAY: 0200-9999-H5 (TOP)
 0200-9999-H6 (BOTTOM)

PACKING QUANTITY: 40 PCS FINISHED GOODS PER TRAY
 6 TRAYS (240 PCS FINISHED GOODS) PER CARTON BOX.

NOTE: CARDBOARD ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX.
 (INCLUDE THE UPPERMOST AND LOWEREST TRAY)

| | | | | | | | | | |
|---------------|----------|---|------------------------|---------------|---|---|--|---|-----------|
| ORIGINATED BY | DATE | TITLE 2X1 gigabit MagJack® (with LED) | PART NO. / DRAWING NO. | STANDARD DIM. | | [] METRIC DIM. AS REFERENCE | |  | |
| BILL\KEUNG | 12-14-05 | | 0845-2R1T-E4 | TOL. IN INCH | | UNIT : INCH [mm] | | | REV. : D |
| DRAWN BY | DATE | | FILE NAME | .X |  | SCALE : N/A | | | SIZE : A4 |
| QIN | 12-14-05 | | 08452R1TE4D.DWG | .XX | | PAGE : 6 | | | |
| | | | .XXX | ±0.004 | |  | | | |

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bel:

[0845-2R1T-E4](#)