

LED 3 POLARITY			LED 4 POLARITY		
PIN 19	PIN 20	COLOR	PIN 21	PIN 22	COLOR
+	-	YELLOW	+	-	GREEN

# ELECTRICAL CHARACTERISTICS @ 25°C

## URNS RATIO

TX 1CT : 1CT ±3%

RX 1CT : 1CT ±3%

DCL @ 100kHz/100mVRMS  
8mA DC BIAS 350µH MIN.

INS. LOSS  
1MHz TO 100MHz -1.0 dB MAX

RET. LOSS (MIN)  
1MHz-30MHz -18 dB  
30MHz-60MHz -18+20LOG(F/30MHz) dB  
60MHz-80MHz -12 dB

CROSS TALK (TX - RX)  
500kHz-1MHz -70 dB MIN  
10 MHz -50 dB MIN  
30 MHz -45 dB MIN  
50 MHz -40 dB MIN  
100 MHz -35 dB MIN

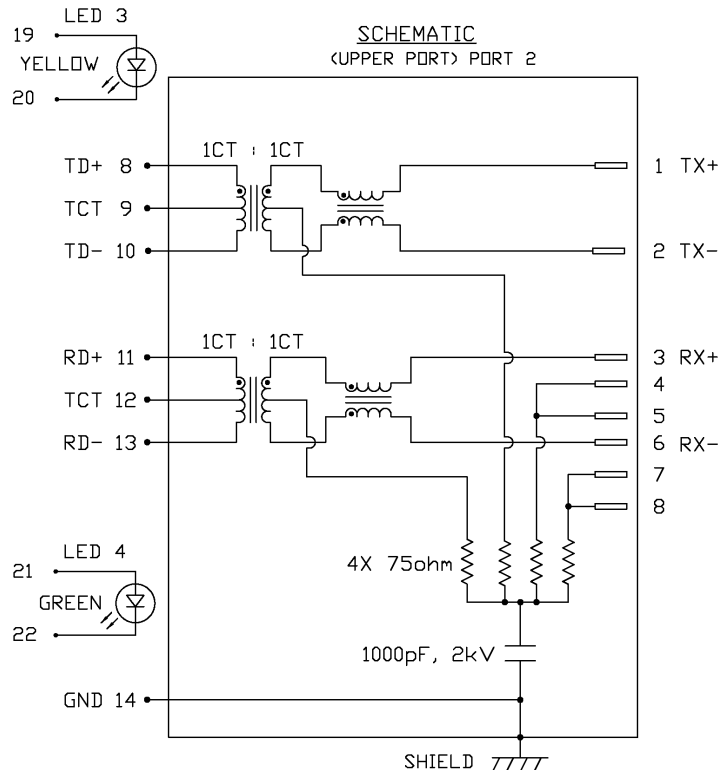
CM TO CM REJ  
100kHz-1MHz -70 dB MIN  
10 MHz -47 dB MIN  
30 MHz -42 dB MIN  
60 MHz -37 dB MIN  
100 MHz -30 dB MIN

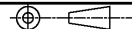
CM TO DM REJ  
100kHz-1MHz -70 dB MIN  
10 MHz -60 dB MIN  
30 MHz -50 dB MIN  
60 MHz -45 dB MIN  
100 MHz -40 dB MIN

HIPOT (Isolation Voltage): 1500 Vrms

LED 3 (Super bright)  
VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.  
λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

LED 4 (Super bright)  
VF (FORWARD VOLTAGE) IF=20mA GREEN 2.2V TYP.  
λD (DOMINANT WAVELENGTH) IF=20mA GREEN 565nm TYP.



ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.		[ ] METRIC DIM. AS REFERENCE	
				TOL. IN INCH		UNIT : INCH [mm]	REV. : B
CHUNG	12-14-05	2X1 MagJack® (with LED)	0845-2D1T-H5	.X		SCALE : N/A	SIZE : A4
DRAWN BY	DATE		FILE NAME	.XX			PAGE : 2
DE	12-14-05		08452D1TH5B.DWG	.XXX			

LED 1 POLARITY			LED 2 POLARITY		
PIN 15	PIN 16	COLOR	PIN 17	PIN 18	COLOR
+	-	YELLOW	+	-	GREEN



# **ELECTRICAL CHARACTERISTICS @ 25°C**

## **URNS RATIO**

TX 1CT : 1CT ±3%

RX 1CT : 1CT ±3%

## **OCL @ 100kHz/100mVRMS**

8mA DC BIAS 350μH MIN.

## **INS. LOSS**

1MHz TO 100MHz -1.0 dB MAX

## **RET. LOSS (MIN)**

1MHz-30MHz -18 dB

30MHz-60MHz -18+20LOG<F/30MHz> dB

60MHz-80MHz -12 dB

## **CROSS TALK (TX - RX)**

500kHz-1MHz -70 dB MIN

10 MHz -50 dB MIN

30 MHz -45 dB MIN

50 MHz -40 dB MIN

100 MHz -35 dB MIN

## **CM TO CM REJ**

100kHz-1MHz -70 dB MIN

10 MHz -47 dB MIN

30 MHz -42 dB MIN

60 MHz -37 dB MIN

100 MHz -30 dB MIN

## **CM TO DM REJ**

100kHz-1MHz -70 dB MIN

10 MHz -60 dB MIN

30 MHz -50 dB MIN

60 MHz -45 dB MIN

100 MHz -40 dB MIN

## **HIPDT (Isolation Voltage):**

1500 Vrms

## **LED 1**

VF (FORWARD VOLTAGE) IF=20mA YELLOW 2.1V TYP.

λD (DOMINANT WAVELENGTH) IF=20mA YELLOW 590nm TYP.

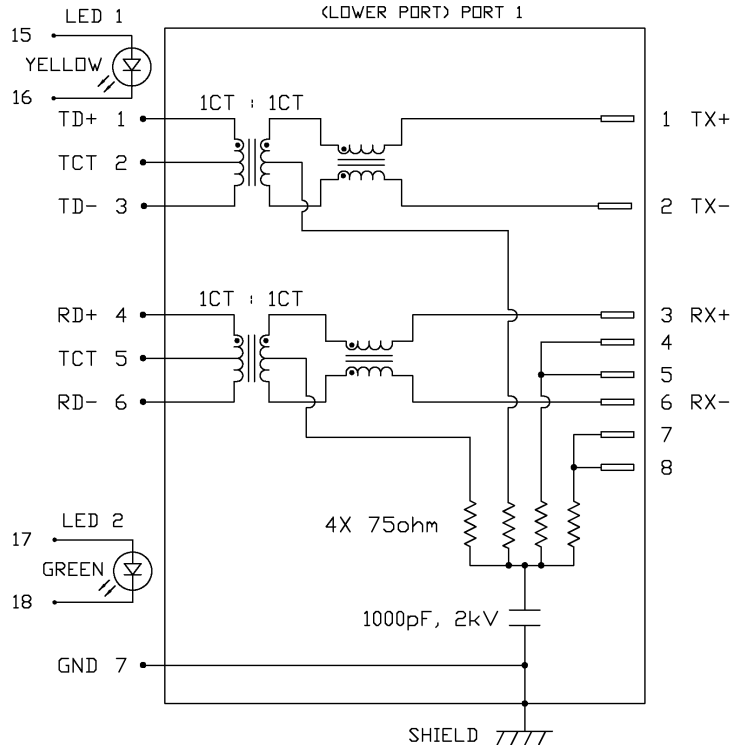
## **LED 2**



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

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

## **SCHEMATIC**

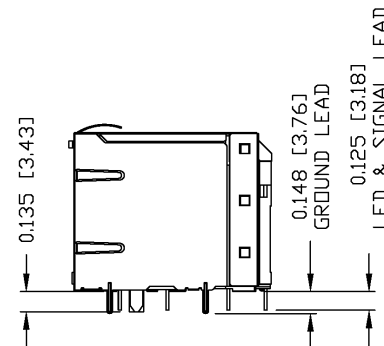
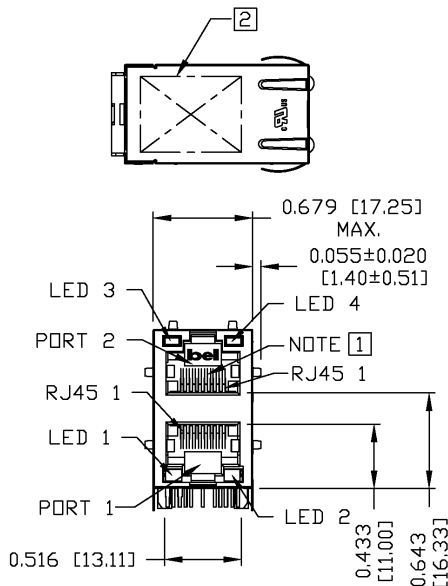
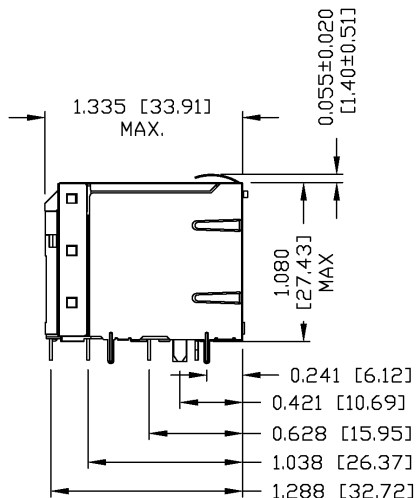
(LOWER PORT) PORT 1



ORIGINATED BY	DATE	TITLE  2X1 MagJack® (with LED)	PART NO. / DRAWING NO.	STANDARD DIM.		[ ] METRIC DIM. AS REFERENCE		 <b>bel</b> COMPONENTS ON A CONNECTED PLANET
CHUNG	12-14-05		0845-2D1T-H5	TOL. IN INCH		UNIT : INCH [mm]	REV. : B	
DRAWN BY	DATE		FILE NAME	.X		SCALE : N/A	SIZE : A4	
DE	12-14-05		08452D1TH5B.DWG	.XX			PAGE : 3	
			.XXX					



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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)

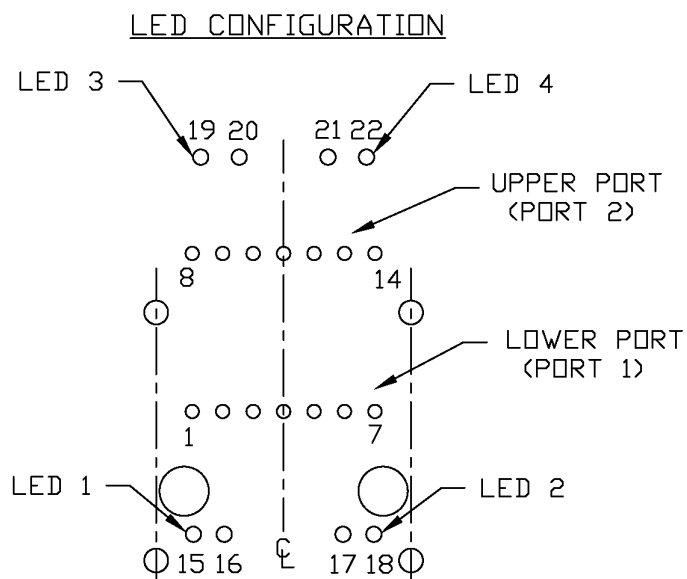
- [1] JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
- [2] MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, AND DATE CODE.

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

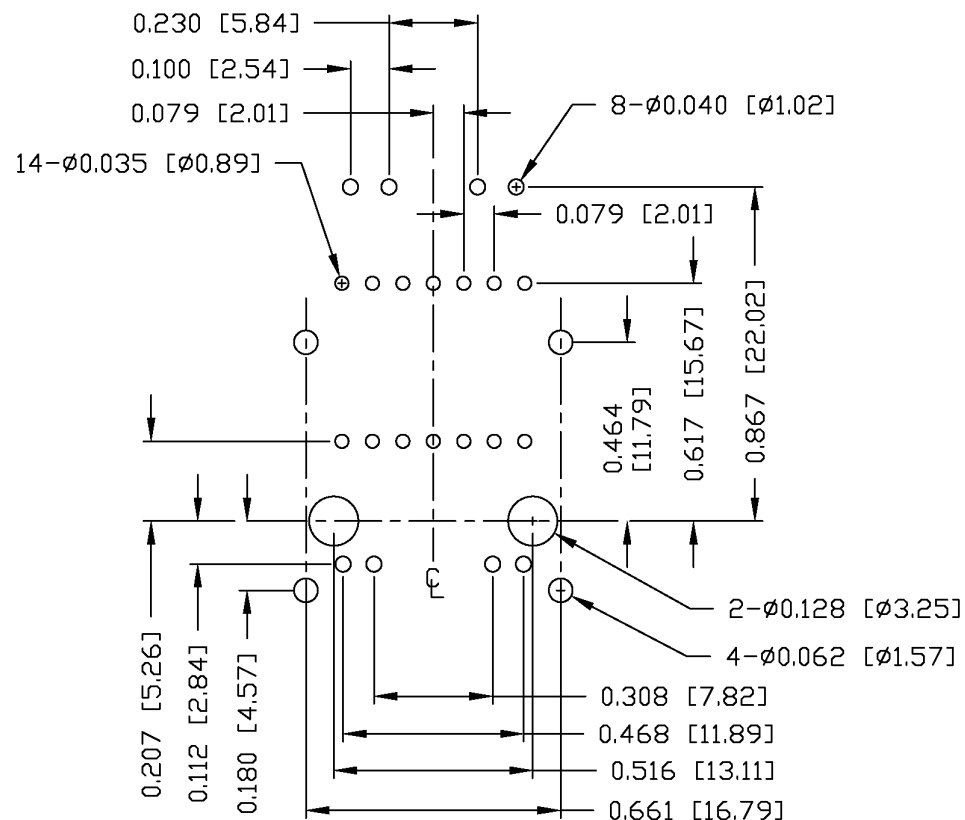
c **UL** US UL RECOGNIZED - FILE #E196366 AND E169987.

ORIGINATED BY	DATE	TITLE	PART NO. / DRAWING NO.	STANDARD DIM.		[ ] METRIC DIM. AS REFERENCE	
				TOL. IN INCH		UNIT : INCH [mm]	REV. : B
BILL/KEUNG	12-14-05	2X1 MagJack® (with LED)	0845-2D1T-H5	.X		SCALE : N/A	SIZE : A4
DRAWN BY	DATE		FILE NAME	.XX		SCALE : N/A	SIZE : A4
QIN	12-14-05		08452D1TH5B.DWG	.XXX	±0.010	SCALE : N/A	PAGE : 4





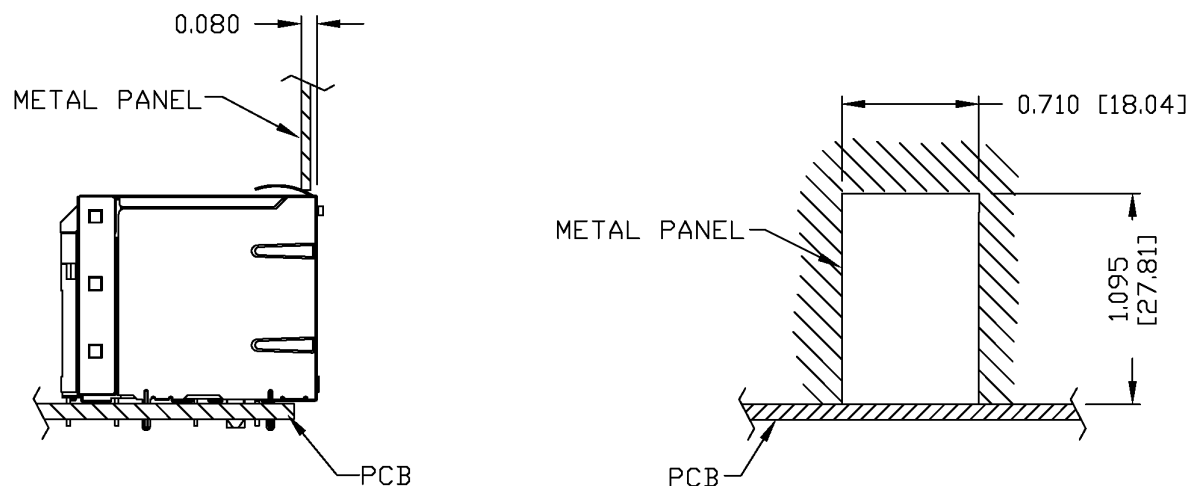
**PIN-OUT INFORMATION**  
(COMPONENT SIDE VIEW)  
(SCALE 2:1)



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

ORIGINATED BY BILL/KEUNG	DATE 12-14-05	TITLE 2X1 MagJack® (with LED)	PART NO. / DRAWING NO. 0845-2D1T-H5		STANDARD DIM. TOL. IN INCH		[ ] METRIC DIM. AS REFERENCE	
			FILE NAME 08452D1TH5B.DWG		.X .XX .XXX		UNIT : INCH [mm] SCALE : N/A	
DRAWN BY QIN	DATE 12-14-05				±0.010		REV. : B SIZE : A4 PAGE : 5	

### SUGGESTED PANEL OPENING



### 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	PART NO. / DRAWING NO.	STANDARD DIM. TOL. IN INCH	[ ] METRIC DIM. AS REFERENCE
BILL/KEUNG	12-14-05	2X1 MagJack® (with LED)	0845-2D1T-H5	.X	UNIT : INCH [mm] REV. : B
DRAWN BY	DATE		FILE NAME	.XX	SCALE : N/A SIZE : A4
QIN	12-14-05		08452D1TH5B.DWG	.XXX ±0.005	PAGE : 6