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



ELECTRICAL CHARACTERISTICS @ 25°C

TRANS. RATIO

TP1	1CT : 1CT $\pm 2\%$
TP2	1CT : 1CT $\pm 2\%$
TP3	1CT : 1CT $\pm 2\%$
TP4	1CT : 1CT $\pm 2\%$

DCL @ 100kHz, 100mVRMS
8mA DC BIAS

INS. LOSS

100kHz TO 100MHz

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):

100% OF PRODUCT TESTED TO COMPLY
WITH IEEE 802.3 ISOLATION REQUIREMENTS

LEAKAGE INDUCTANCE

PRIMARY W/ SECONDARY SHORTED	0.3 μ H Max. @ 1MHz
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INTERWINDING CAPACITANCE

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

OPERATING TEMPERATURE: -40 TO +85°C

LED 1

VF (FORWARD VOLTAGE)	IF=20mA GREEN 2.2V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA GREEN 570nm TYP.

LED 2

VF (FORWARD VOLTAGE)	IF=20mA GREEN 2.2V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA GREEN 570nm TYP.
	YELLOW 2.1V TYP.
	IF=20mA GREEN 590nm TYP.

ORIGINATED BY
CHOW WAN CHUNG
DATE 2018-12-19

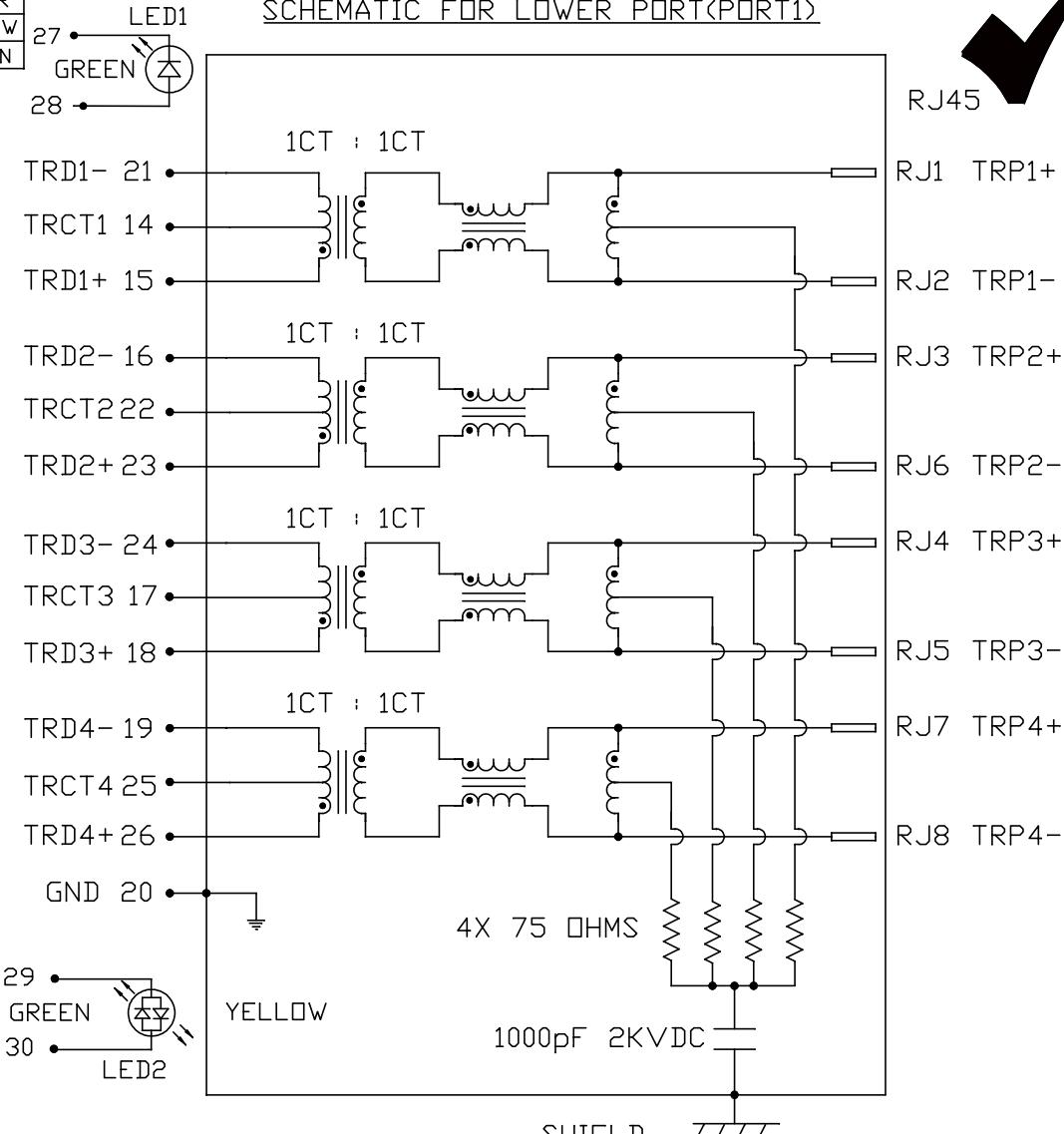
DRAWN BY
XIE YIMING
DATE 2018-12-19

TITLE
2X1 gigabit MagJack®
(with LED)
PATENTED
(Extend Temperature of -E4)

PART NO. / DRAWING NO.
0845-2R1T-DY

FILE NAME
0845-2R1T-DY_B.DWG

SCHEMATIC FOR LOWER PORT(PORT1)



REV. : B PAGE : 2

 **bel** MAGNETIC
SOLUTIONS
a bel group

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ELECTRICAL CHARACTERISTICS @ 25°C

TURN'S RATIO

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

ΔCL @ 100kHz,100mVRMS
8mA DC BIAS

INS. LOSS
100KHz TO 100MHz

RET. LOSS (MIN)	
1MHz-30MHz	-1.1 dB MAX
30MHz-60MHz	-18 dB
60MHz-80MHz	-16 dB
80MHz-100MHz	-14 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):	
100% OF PRODUCT TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS	1500 Vrms

LEAKAGE INDUCTANCE	
PRIMARY W/ SECONDARY SHORTED	0.3μH 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

OPERATING TEMPERATURE:	
	-40 TO +85°C

LED 3 (Super bright)	
VF (FORWARD VOLTAGE)	IF=20mA GREEN 2.2V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA GREEN 570nm TYP.

LED 4 (Super bright)	
VF (FORWARD VOLTAGE)	IF=20mA GREEN 2.2V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA GREEN 570nm TYP.

LED 4 (Super bright)	
VF (FORWARD VOLTAGE)	IF=20mA GREEN 2.1V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA GREEN 590nm TYP.

LED 4 (Super bright)	
VF (FORWARD VOLTAGE)	IF=20mA GREEN 570nm TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA GREEN 590nm TYP.

LED 4 (Super bright)	
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LED 4 (Super bright)	
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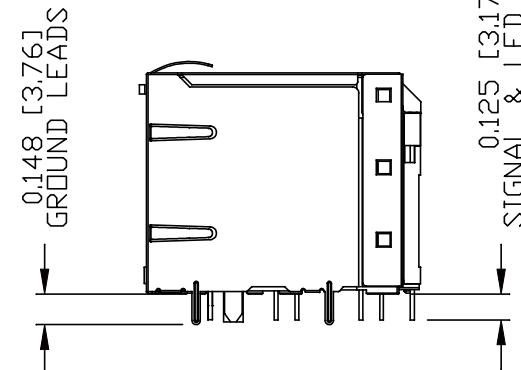
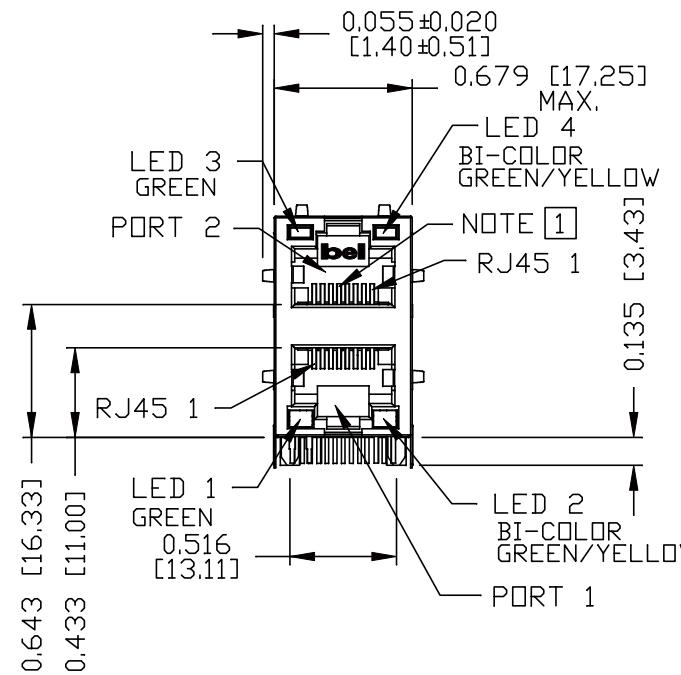
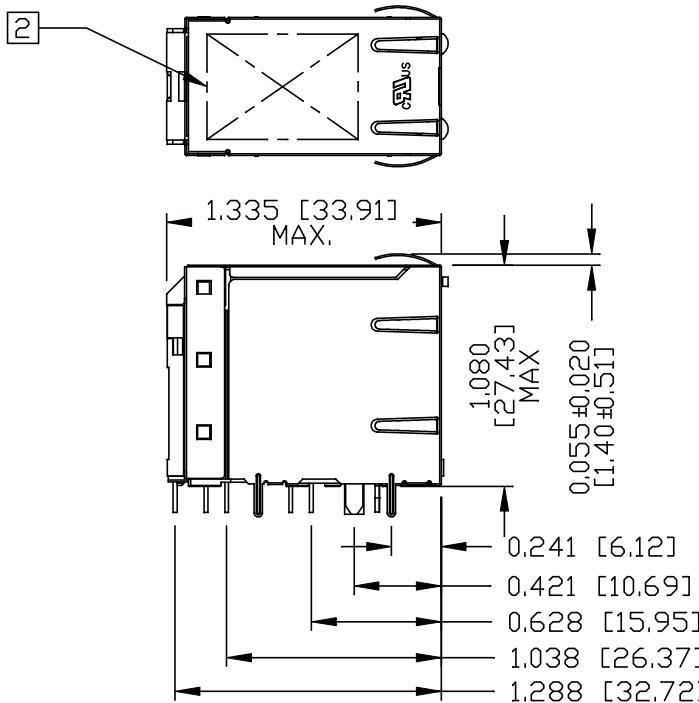
LED 4 (Super bright)	
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LED 4 (Super bright)	
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LED 4 (Super bright)	
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RoHS



NOTES:

PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK
FLAMMABILITY RATING UL 94V-0

CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.

OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.
100 MICRO-INCH MIN MATTE TIN.
PINS ARE SOLDER DIPPED.

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.

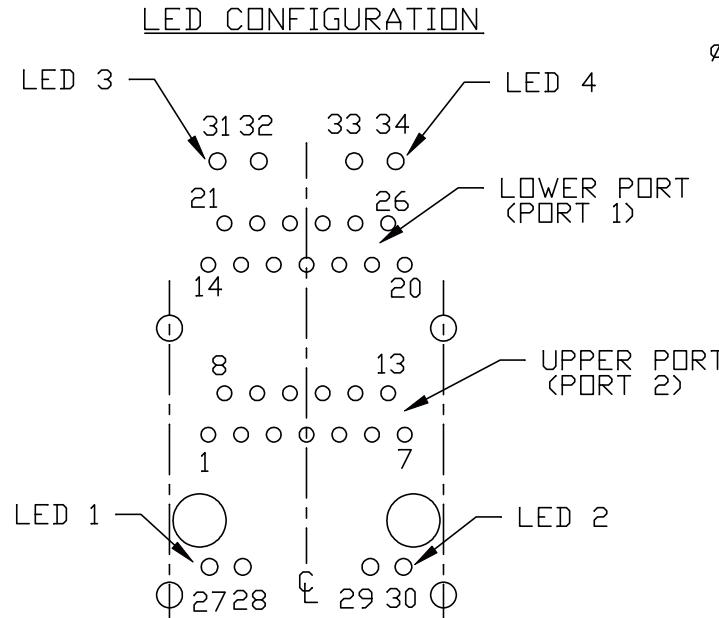
2. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, DATE CODE, AND PATENTED.

3. THE PRODUCT IS RoHS COMPLIANCE.
cUL RECOGNIZED - FILE #E196366 AND E169987.
4. THE PRODUCT IS PATENTED. THE PATENT NUMBER IS
U.S. PAT. 6,840,817.
5. THE PART IS RECOMMENDED FOR WAVE SOLDERING.
THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS
260°C MAX AND 10 SECONDS MAX.

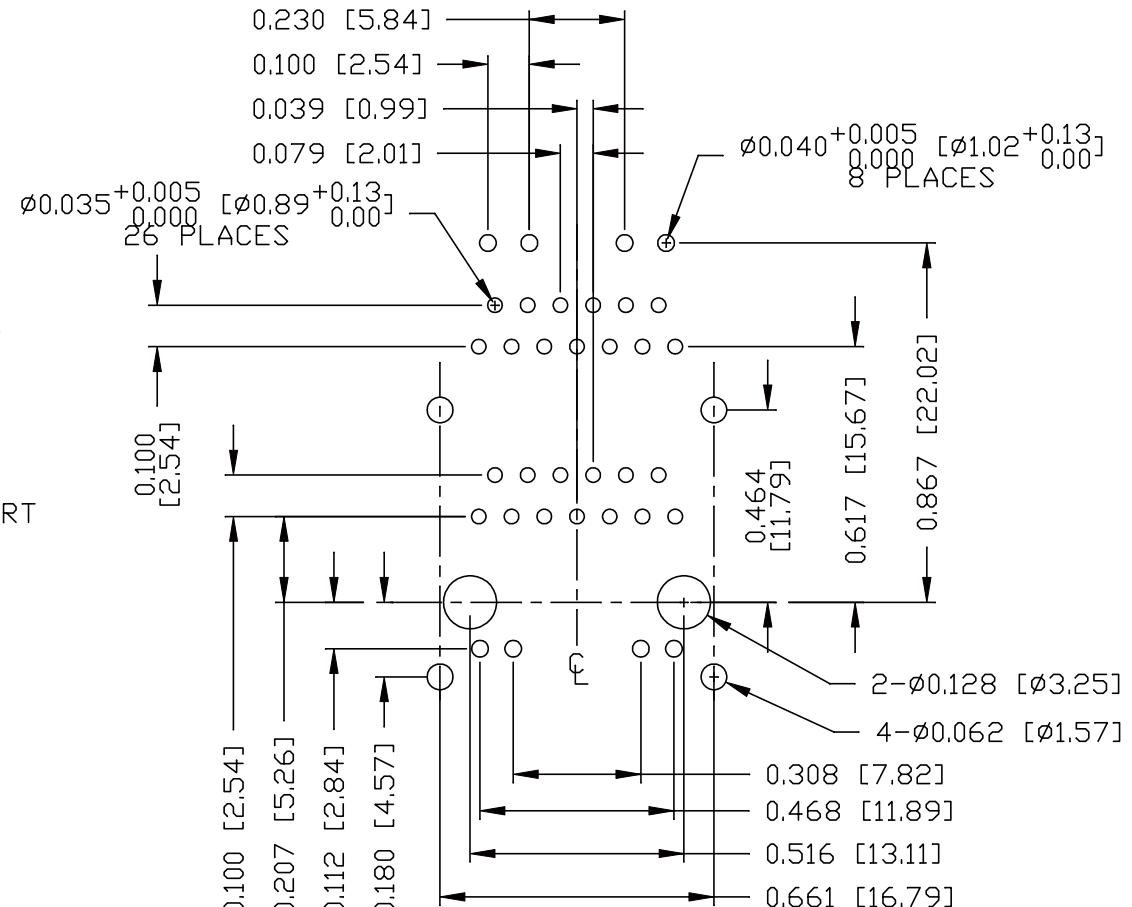
REV. :	B	PAGE :	4
ORIGINATED BY SANDY LIN DATE 2018-12-19	TITLE 2X1 gigabit MagJack® (with LED) PATENTED (Extend Temperature of -E4)	PART NO. / DRAWING NO. 0845-2R1T-DY FILE NAME 0845-2R1T-DY_B.DWG	STANDARD DIM. TOL. IN INCH .X .XX .XXX
			[] METRIC DIM. AS REF. UNIT : INCH [mm] SCALE : N/A SIZE : A4



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

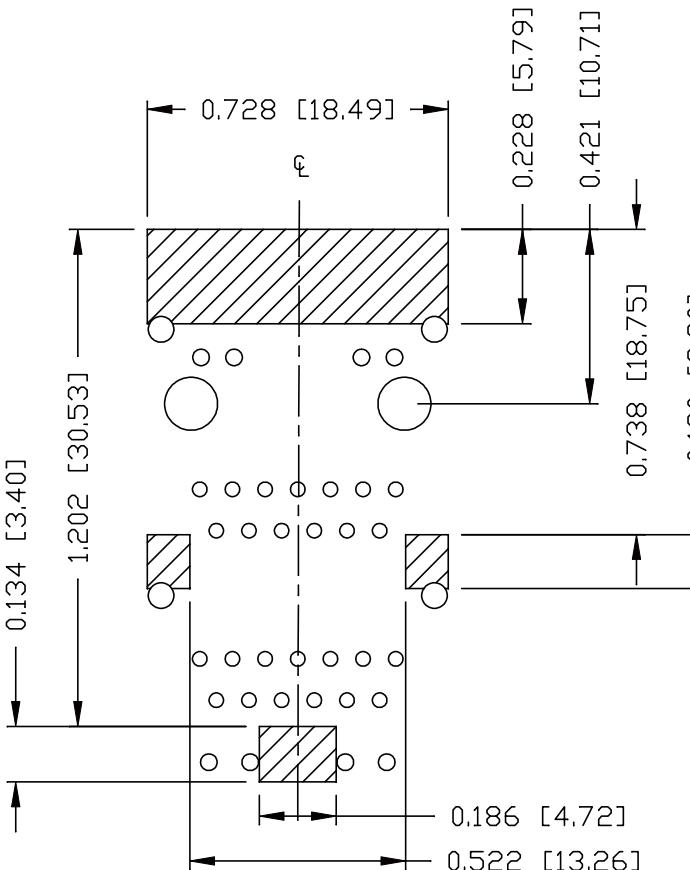


SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)
(SCALE 2:1)

ORIGINATED BY	TITLE	PART NO. / DRAWING NO.	STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REF.	REV. : B	PAGE : 5
SANDY LIN DATE 2018-12-19	2X1 gigabit MagJack® (with LED) PATENTED (Extend Temperature of -E4)	0845-2R1T-DY	.X	UNIT : INCH [mm]		
DRAWN BY OLIVER ZHANG DATE 2018-12-19		FILE NAME	.XX	SCALE : N/A		
		0845-2R1T-DY_B.DWG	.XXX	±0.004		

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NOTES

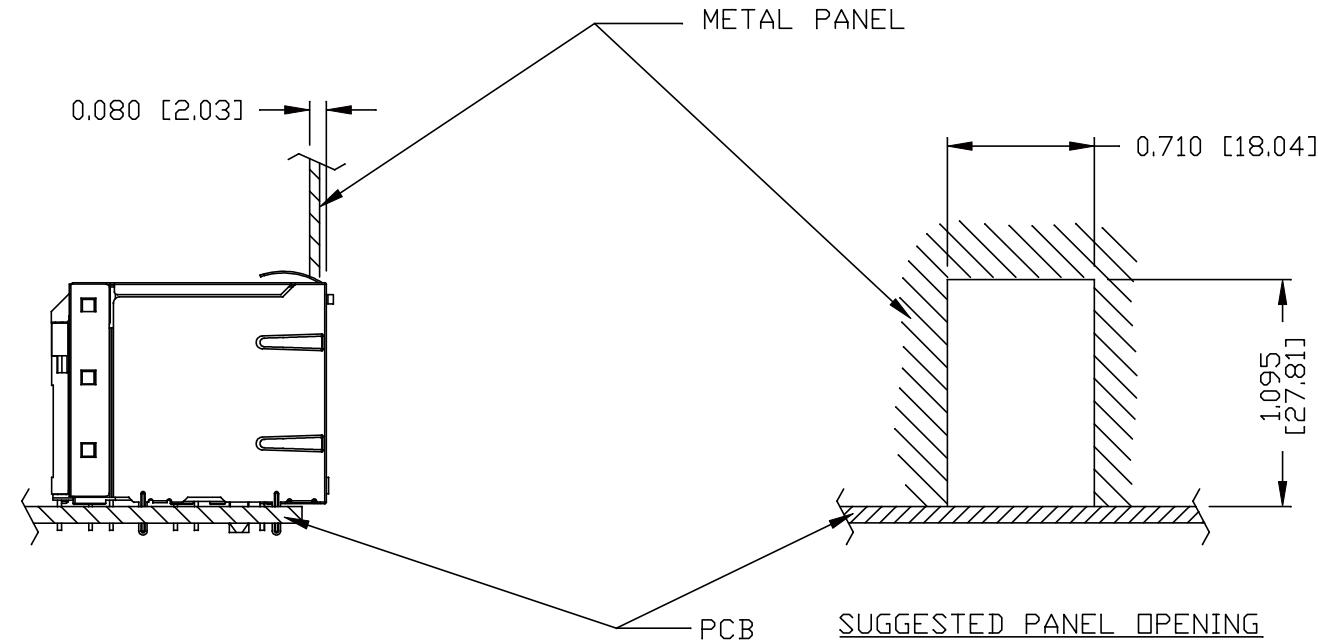
THE SHADED AREA ON THE CUSTOMER BOARD ARE
RECOMMENDED TO BE CLEAR OFF ANY VIA HOLE OR
COMPONENT PAD.

REV. : B PAGE : 6

ORIGINATED BY SANDY LIN DATE 2018-12-19	TITLE 2X1 gigabit MagJack® (with LED) PATENTED (Extend Temperature of -E4)	PART NO. / DRAWING NO. 0845-2R1T-DY FILE NAME 0845-2R1T-DY_B.DWG	STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REF.
			.X	UNIT : INCH [mm]
			.XX	SCALE : N/A

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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)

		REV. : B		PAGE : 7	
ORIGINATED BY SANDY LIN DATE 2018-12-19	TITLE 2X1 gigabit MagJack® (with LED) PATENTED (Extend Temperature of -E4)	PART NO. / DRAWING NO. 0845-2R1T-DY	STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REF.	
		FILE NAME 0845-2R1T-DY_B.DWG	.X	UNIT : INCH [mm]	
			.XX	SCALE : N/A	
			.XXX	±0.005	SIZE : A4



Mouser Electronics

Authorized Distributor

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

Bel:

0845-2R1T-DY