

THE INFORMATION CONTAINED HEREIN IS CONSIDERED "PROPRIETARY" TO BEL FUSE INC. AND SHALL NOT BE COPIED, REPRODUCED OR DISCLOSED WITHOUT THE WRITTEN APPROVAL OF BEL FUSE INC.

ELECTRICAL CHARACTERISTICS @ 25°C**URNS RATIO**

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

QCL @ 100kHz,100mVRMS

8mA DC BIAS 350 µH MIN.

INS. LOSS

100KHz TO 100MHZ -11 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):

100% OF PRODUCT TESTED TO COMPLY

WITH IEEE 802.3 ISOLATION REQUIREMENTS

LEAKAGE INDUCTANCE

PRIMARY W/ SECONDARY SHORTED 0.3µH 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

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.

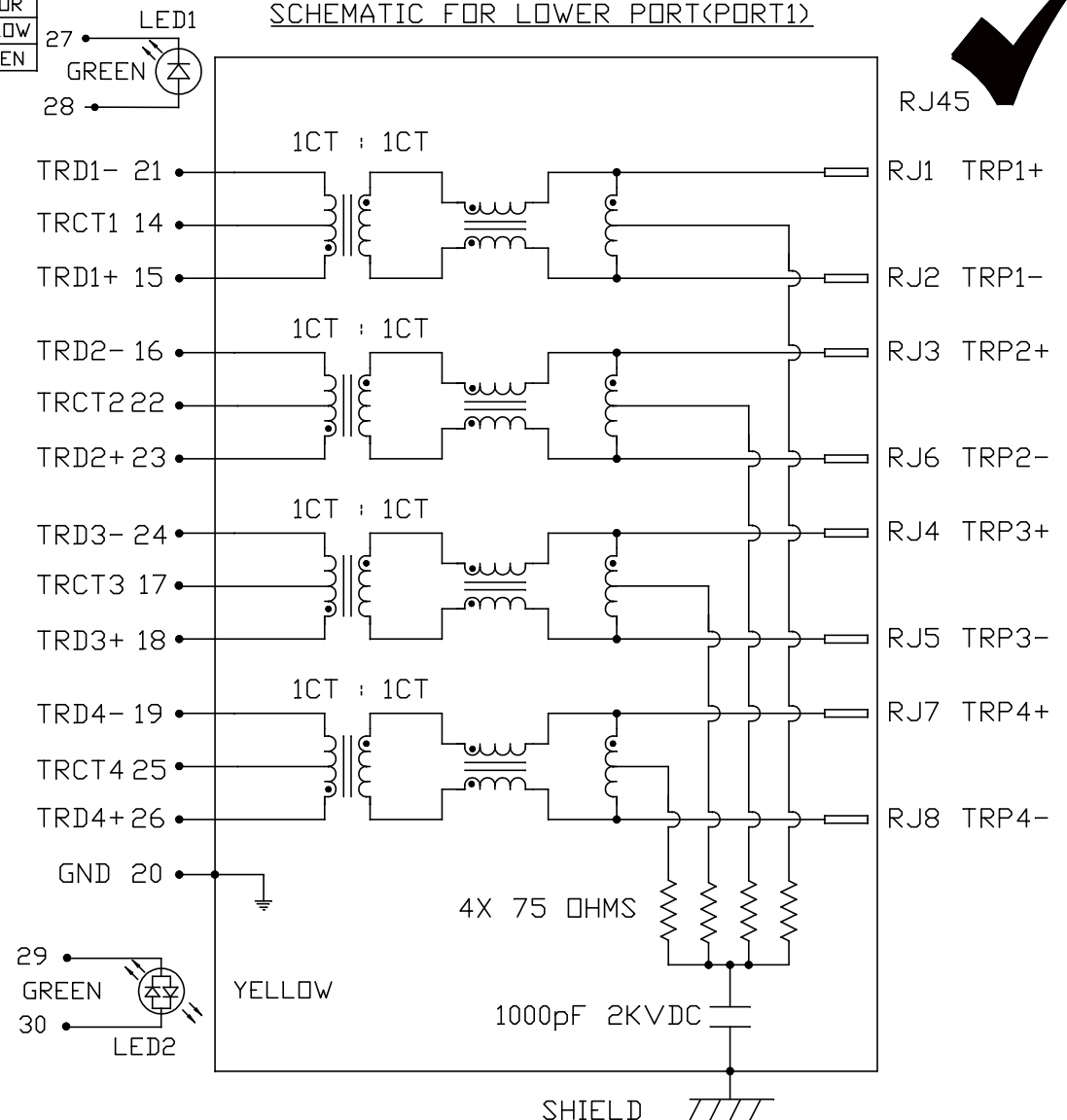
λD (DOMINANT WAVELENGTH)

IF=20mA GREEN 570nm TYP.

IF=20mA YELLOW 2.1V TYP.

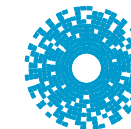
IF=20mA YELLOW 590nm TYP.

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



REV. : B

PAGE : 2



bel MAGNETIC SOLUTIONS

a bel group

ORIGINATED BY
CHOW WANCHUNG
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

STANDARD DIM.	TOL. IN INCH	[] METRIC DIM.	AS REF.
.X		UNIT : INCH [mm]	
.XX		SCALE : N/A	
.XXX		SIZE : A4	

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

ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

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

□CL @ 100kHz,100mVRMS

8mA DC BIAS	350 μH 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
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CROSS TALK

1MHz - 60MHz	-35 dB TYP
60MHz - 100MHz	-25 dB TYP

HIPOT (Isolation Voltage):

1500 Vrms

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

LEAKAGE INDUCTANCE

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

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

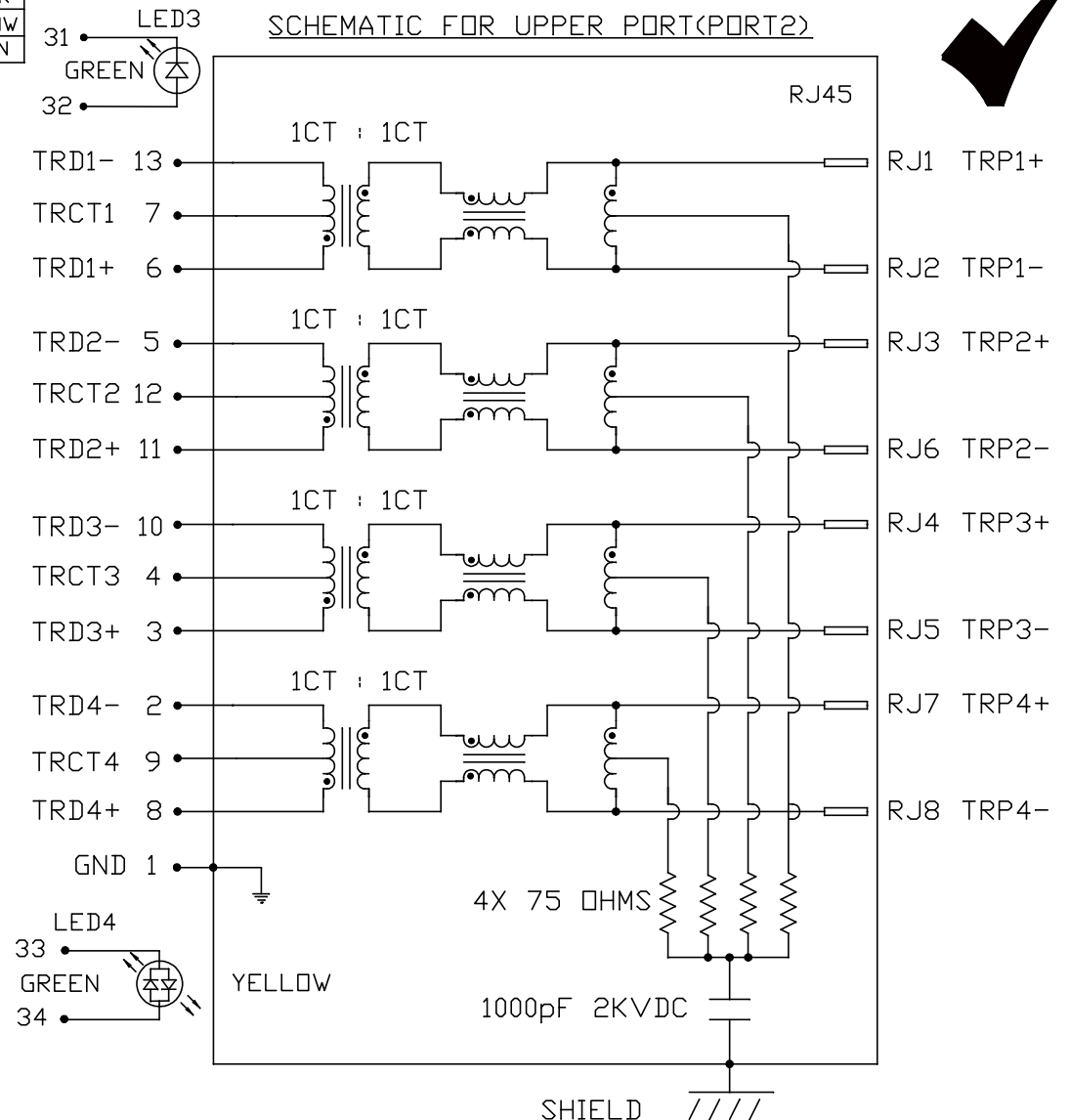
-40 TO +85°C

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



ORIGINATED BY
CHOW WANCHUNG
DATE 2018-12-19

TITLE
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PATENTED
(Extend Temperature of -E4)

DRAWN BY
XIE YIMING
DATE 2018-12-19

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

FILE NAME
0845-2R1T-DY_B.DWG

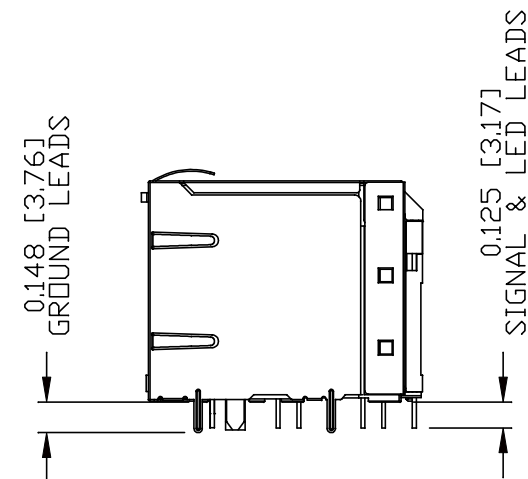
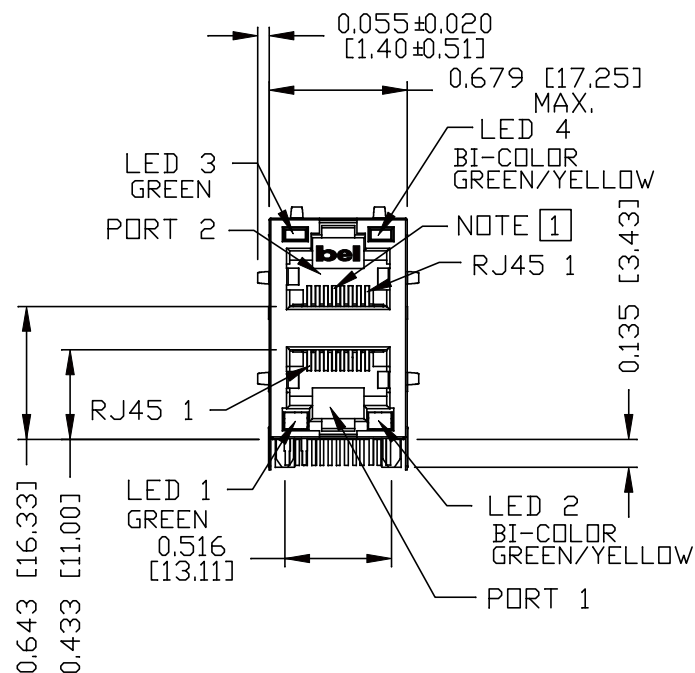
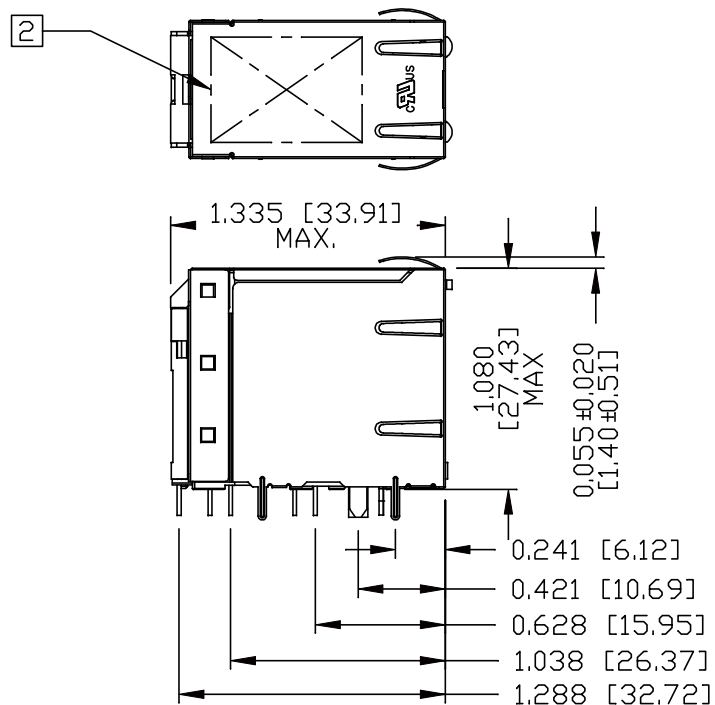
STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.	
.X		UNIT : INCH [mm]	
.XX		SCALE : N/A	
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**NOTES:**

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.

 UsUL 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

DRAWN BY
OLIVER ZHANG
DATE 2018-12-19

TITLE
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(with LED)
PATENTED
(Extend Temperature of -E4)

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

FILE NAME
0845-2R1T-DY_B.DWG

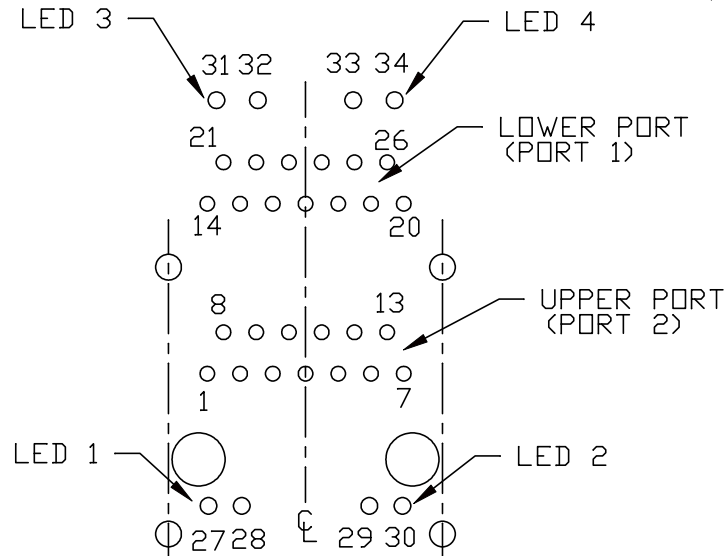
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TOL. IN INCH		AS REF.	
.X		UNIT : INCH [mm]	
.XX		SCALE : N/A	
.XXX	±0.010	SIZE : A4	





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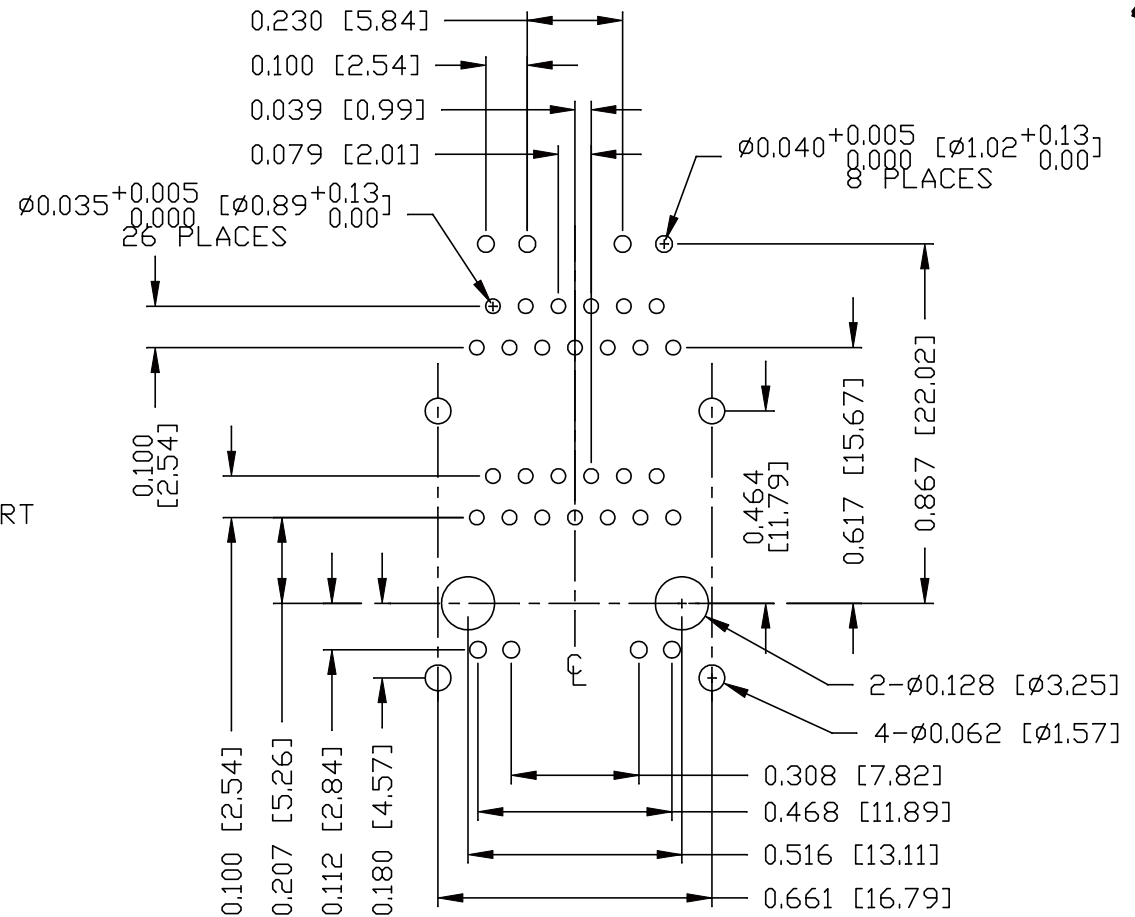
LED CONFIGURATION



PIN-OUT INFORMATION

(COMPONENT SIDE VIEW)

(SCALE 2:1)

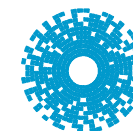


SUGGESTED FOOTPRINT

(COMPONENT SIDE VIEW)

(SCALE 2:1)

REV. : B PAGE : 5



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OLIVER ZHANG
DATE 2018-12-19

TITLE
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(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

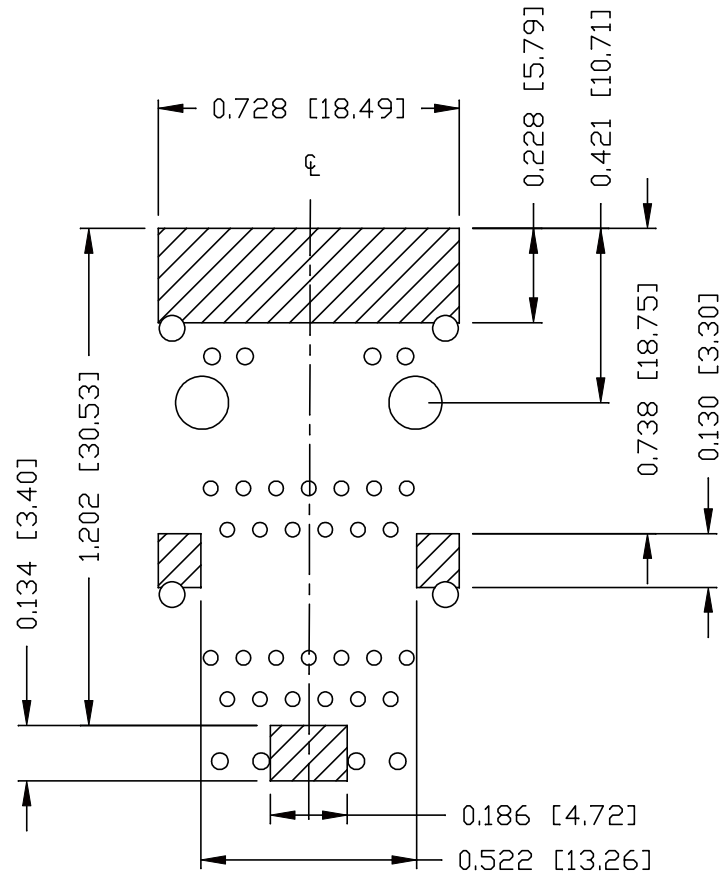
.X
.XX
.XXX

[] METRIC DIM.
AS REF.

UNIT : INCH [mm]
SCALE : N/A
SIZE : A4



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**NOTES**

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

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ORIGINATED BY
SANDY LIN
DATE 2018-12-19

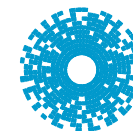
DRAWN BY
OLIVER ZHANG
DATE 2018-12-19

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PATENTED
(Extend Temperature of -E4)

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

FILE NAME
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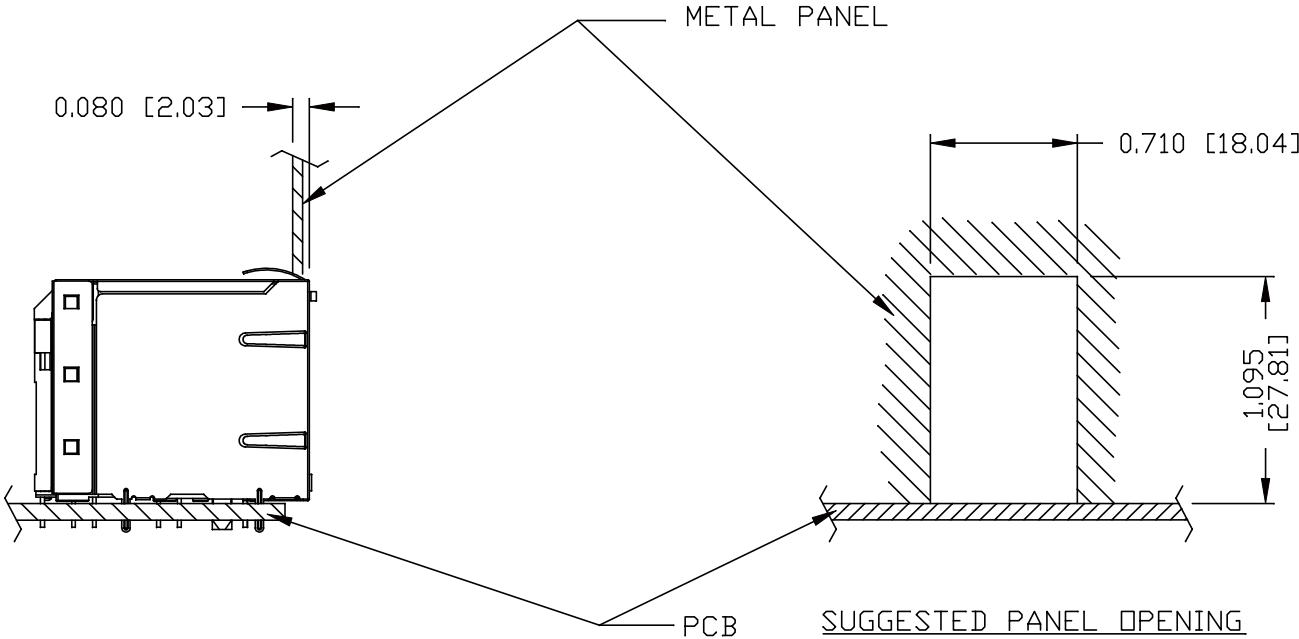
STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.
.X		UNIT : INCH [mm]
.XX		SCALE : N/A
.XXX	±0.004	SIZE : A4



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RoHS




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)

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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.	
DRAWN BY OLIVER ZHANG DATE 2018-12-19		FILE NAME 0845-2R1T-DY_B.DWG	.X		UNIT : INCH [mm]	
			.XX		SCALE : N/A	
				.XXX	±0.005	