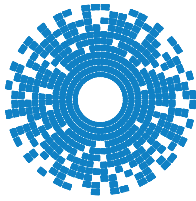




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bel

POWER | PROTECT | CONNECT

DOCUMENT / PART NO.: 0879-2B4J-JE

TITLE : PRODUCT SPECIFICATION

ISSUE	DESCRIPTION OF CHANGE								REVIEWED BY				APPROVED BY				ECN#
PA	PRELIMINARY								ANTON LIAD				LEUNG WAI SHUN (2015-10-29)				
PB	DELETE THE DESCRIPTION FOR BALANCED LINE CURRENT								ANTON LIAD				LEUNG WAI SHUN (2015-12-28)				
PC	ADD INDUSTRIAL TEMP AND CHANGE OCL REQUIREMENT								ANTON LIAD				LEUNG WAI SHUN (2017-04-23)				
PD	UPDATE THE ELECTRICAL CHARACTERISTICS TO UNIFY THE 2.5G PRODUCT SPECIFICATION								CHOW WANCHUNG				LEUNG WAI SHUN (2020-02-17)				RD2200010
5	UPDATE THE VERSION FOR D365 SYSTEM								ANTON LIAD				LEUNG WAI SHUN (2021-02-01)				
6	REMOVE THE "PRELIMINARY" MARK								TONY YUAN								RD2250023

PAGE	1	2	3	4	5	6	7										
REV.	6	6	6	6	6	6	6										
PAGE																	
REV.																	

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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
(-40°C - 85°C) 180 µH MIN.

INS. LOSS
1MHz TO 150MHz -0.004<fMHz>-0.4 dB MAX

RET. LOSS
1MHz-40MHz -20 dB MIN
40.1MHz-150MHz -20+15LOG<f/40MHz> dB MIN

CROSSTALK
1MHz - 40MHz -35 dB MIN
40.1MHz-150MHz -35+15LOG<f/40MHz> dB MIN

CM TO CM REJ
1MHz - 150MHz -25 dB MIN

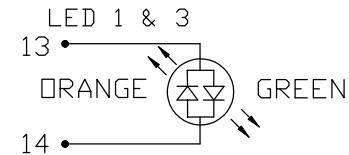
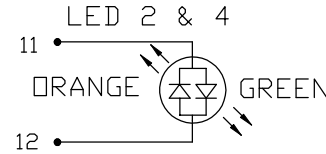
HIPOT (Isolation Voltage): 2250 VDC
100% OF PRODUCTION TESTED TO COMPLY WITH
IEEE 802.3 ISOLATION REQUIREMENTS.

NOTE: PORT-TO-PORT ISOLATION NOT INCLUDED .

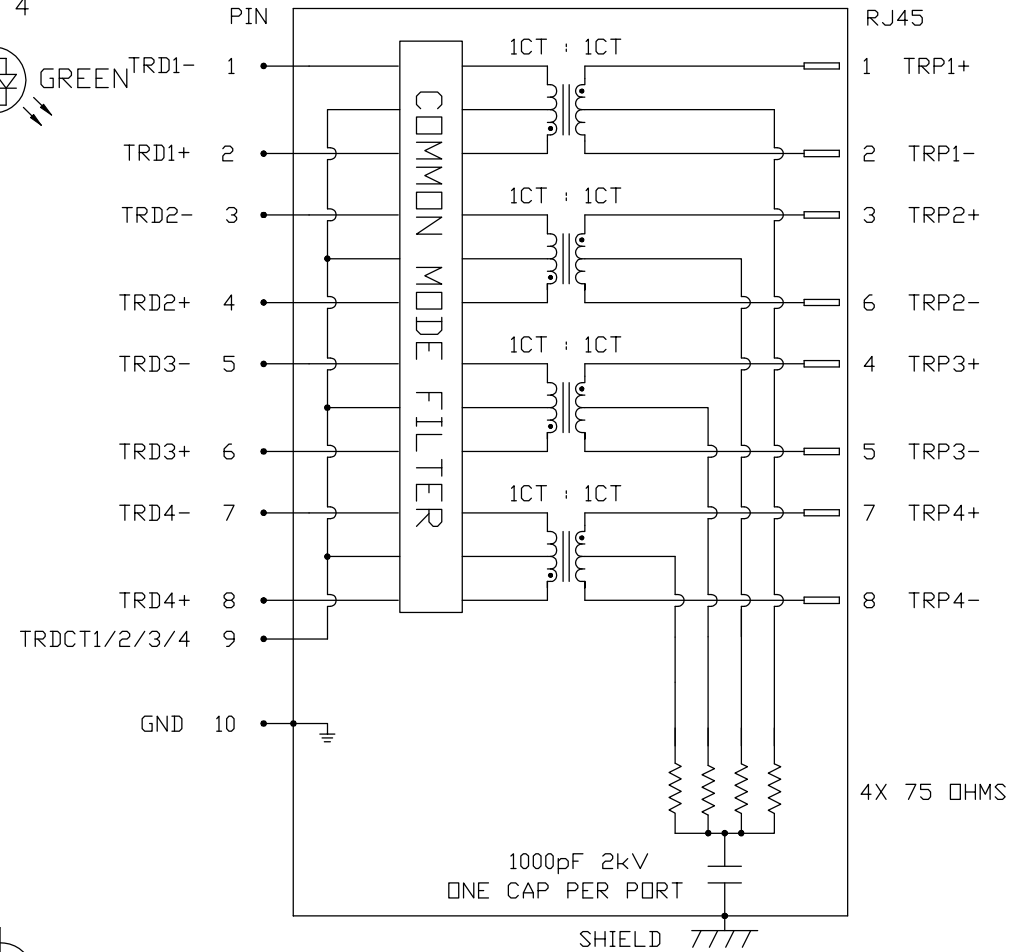
LEDS 1, 2, 3 AND 4
VF (FORWARD VOLTAGE) IF=20mA ORANGE 2.0V TYP.
GREEN 2.2V TYP.
λD (DOMINANT WAVELENGTH) IF=20mA ORANGE 605nm TYP.
GREEN 570nm TYP.

OPERATING TEMPERATURE: -40°C TO +85°C.

LED 2 & 4 POLARITY			LED 1 & 3 POLARITY		
PIN 11	PIN 12	COLOR	PIN 13	PIN 14	COLOR
-	+	ORANGE	-	+	ORANGE
+	-	GREEN	+	-	GREEN



SCHEMATIC



RoHS



ORIGINATED BY
BILL LIU
DATE 2025-05-08

DRAWN BY
VERN WANG
DATE 2025-05-08

TITLE
2X4 2.5 gigabit MagJack®
WITH UPPER AND LOWER LED
(8 Cores, Extended Temp.)
PATENTED

PART NO. / DRAWING NO.
0879-2B4J-JE

FILE NAME
0879-2B4J-JE_6.DWG

STANDARD DIM.
TOL. IN INCH

.X
.XX
.XXX

[] METRIC DIM.
AS REF.

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

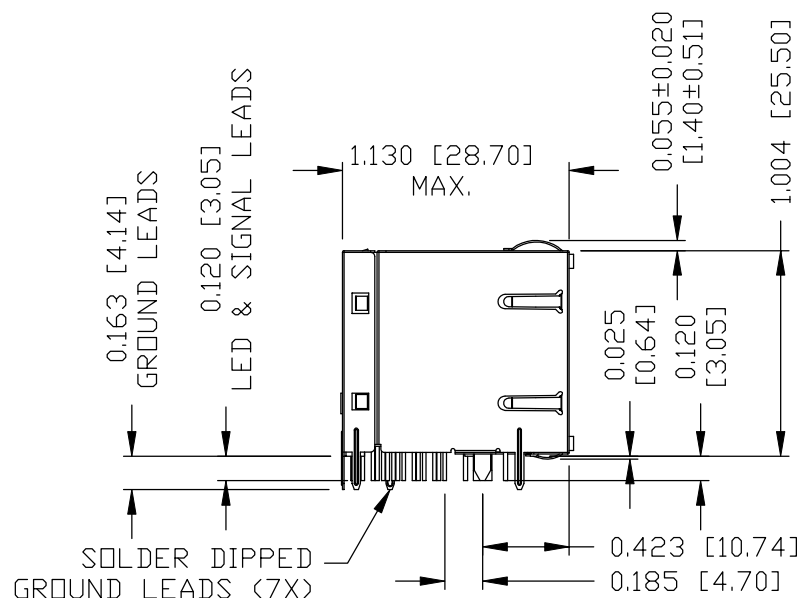
REV. : 6

PAGE : 2



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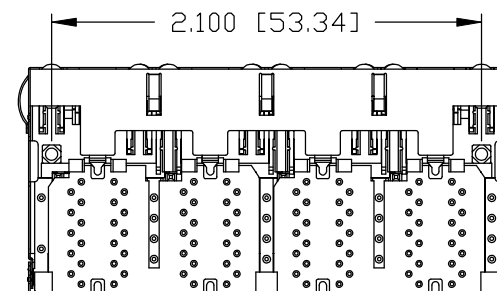
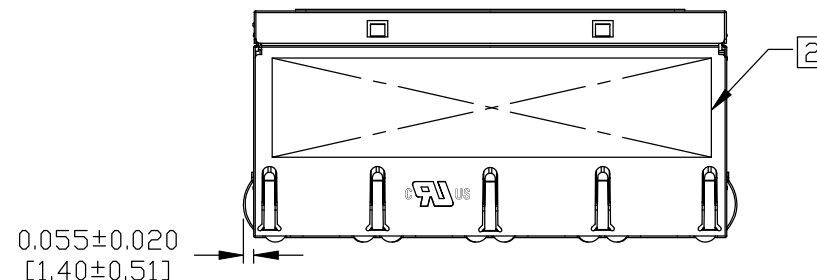
NOTES:

- 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)


- JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
- MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER, DATE CODE AND PATENTED.
- THE PRODUCT IS RoHS COMPLIANT.

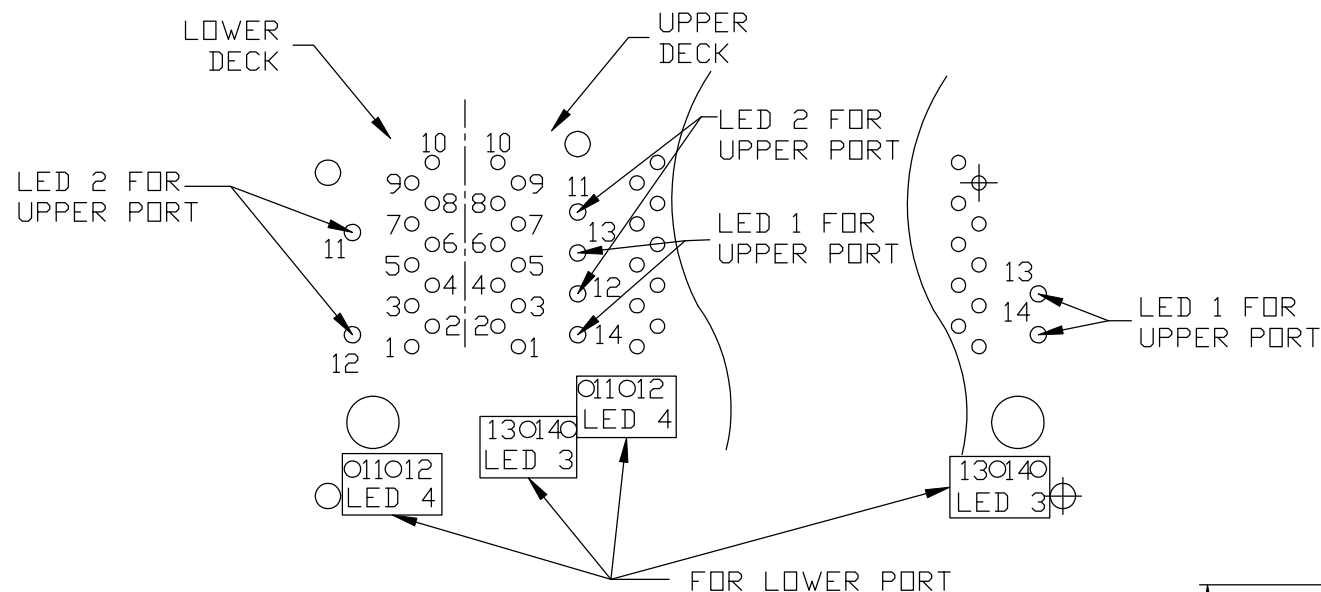
 UL RECOGNIZED - FILE #E196366 AND E169987.

- THE PRODUCT IS PATENTED PRODUCT. THE PATENT NUMBER ARE U.S. PAT. 6,840,817 AND U.S. PAT. 7,123,117.



- THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

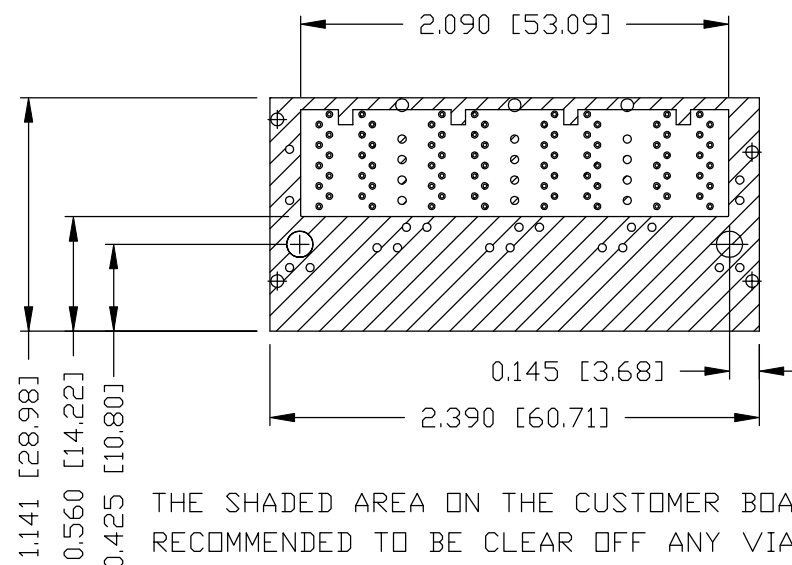
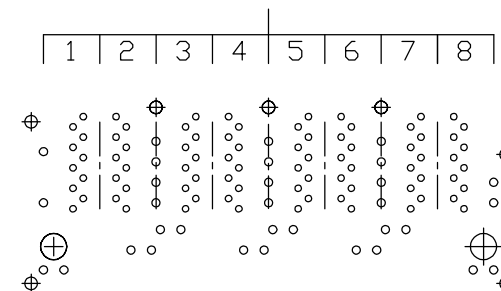
ORIGINATED BY TONY YUAN DATE 2025-05-08	TITLE 2X4 2.5 gigabit MagJack® WITH UPPER AND LOWER LED (8 Cores, Extended Temp.) PATENTED	PART NO. / DRAWING NO. 0879-2B4J-JE	STANDARD DIM. TOL. IN INCH	[] METRIC DIM. AS REF.	<div> <div>REV. : 6</div> <div>PAGE : 3</div> </div> <div>  bel MAGNETIC SOLUTIONS a bel group </div>
DRAWN BY PETER QIU DATE 2025-05-08		FILE NAME 0879-2B4J-JE_6.DWG	.X .XX .XXX ±0.010	UNIT : INCH [mm] SCALE : N/A SIZE : A4	



PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)

10	GND		
9	TRDCT1/2/3/4		
8	TRD 4+		
7	TRD 4-		
6	TRD 3+		
5	TRD 3-		
4	TRD 2+	14	ORANGE (+)/GREEN (-)
3	TRD 2-	13	ORANGE (-)/GREEN (+)
2	TRD 1+	12	ORANGE (+)/GREEN (-)
1	TRD 1-	11	ORANGE (-)/GREEN (+)

PORT ASSIGNMENT
(COMPONENT SIDE VIEW)



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

ORIGINATED BY
TONY YUAN
DATE 2025-05-08

DRAWN BY
PETER QIU
DATE 2025-05-08

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.X
.XX
.XXX ±0.004

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AS REF.

UNIT : INCH [mm]
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REV. : 6

PAGE : 4



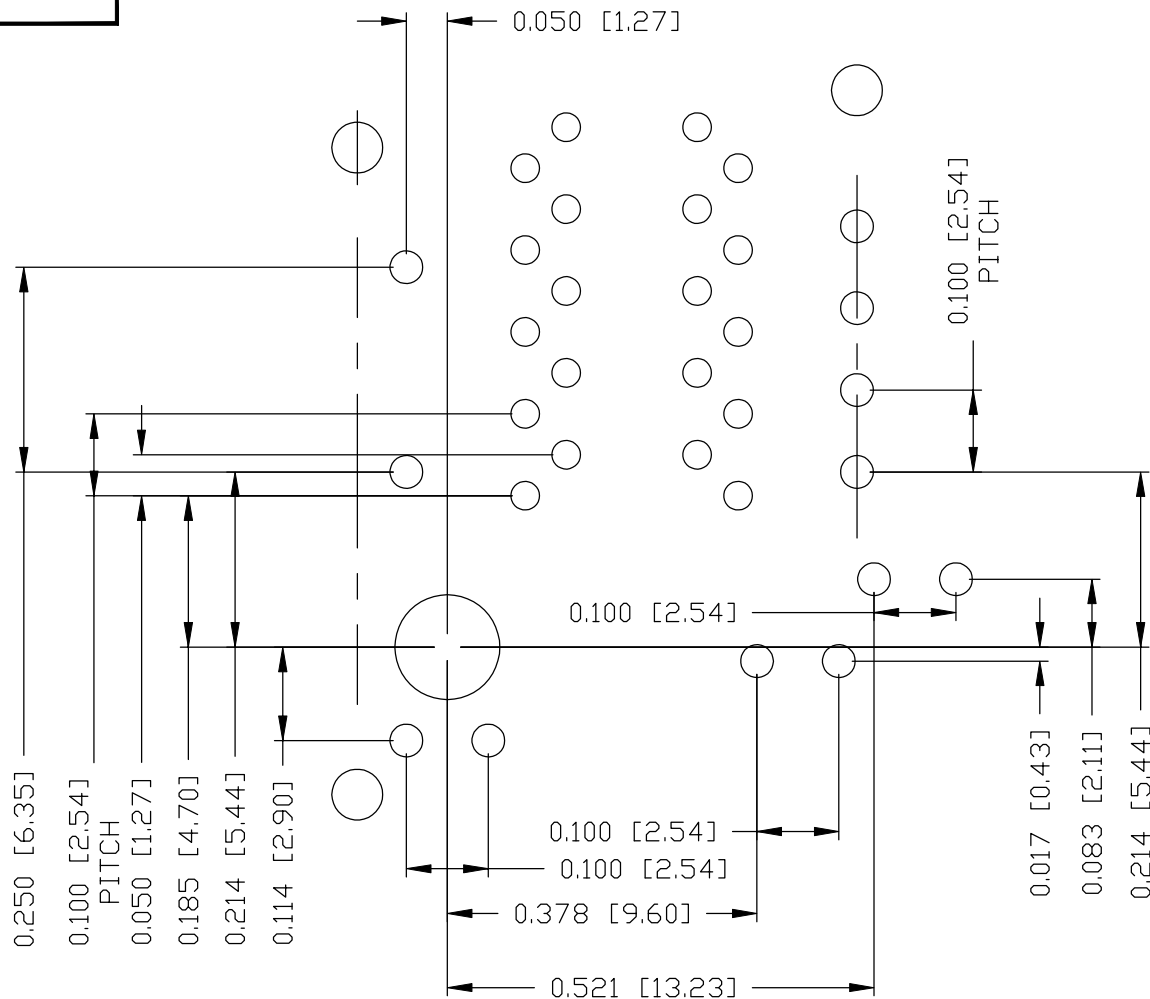
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DETAIL A

ORIGINATED BY
TONY YUAN
DATE 2025-05-08

DRAWN BY
PETER QIU
DATE 2025-05-08

TITLE
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STANDARD DIM.
TOL. IN INCH

.X
.XX
.XXX

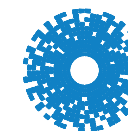
±0.004

[] METRIC DIM.
AS REF.

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

REV. : 6

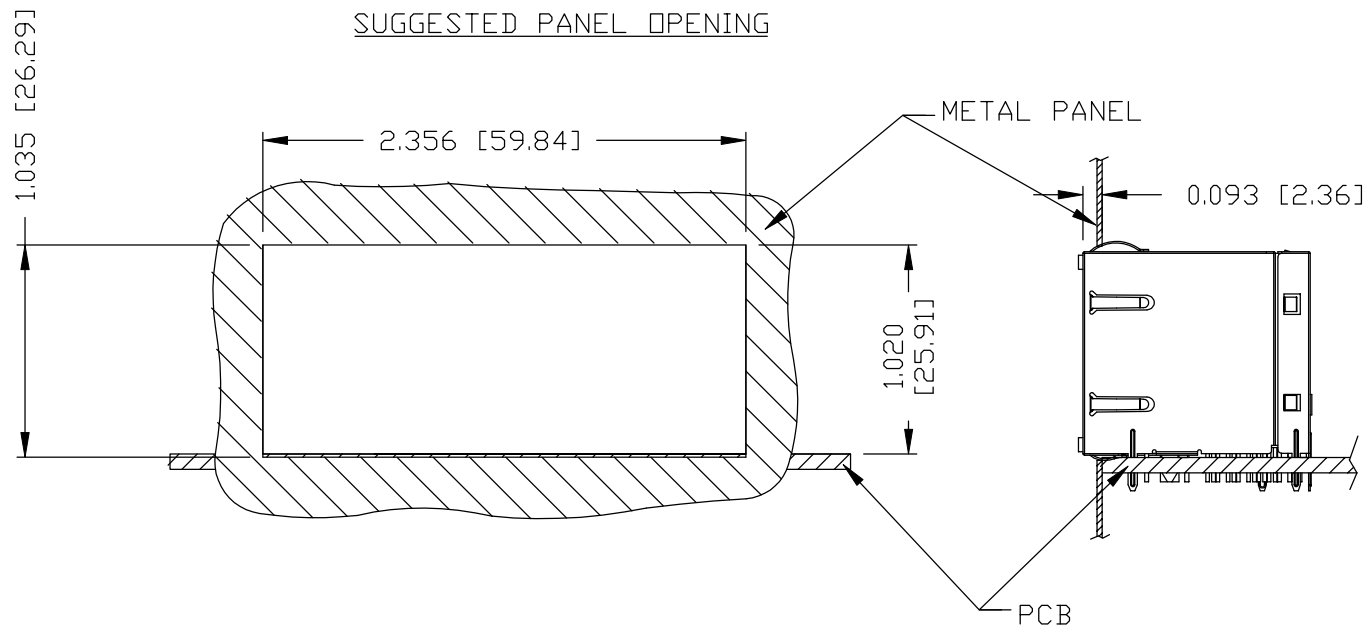
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NOTE:

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-Q1 (TOP)
0200-9999-Q2(BOTTOM)
PACKING QUANTITY : 20 PCS FINISHED GOODS PER TRAY
7 TRAYS (140 PCS FINISHED GOODS) PER CARTON BOX

NOTE : CARDBOARDS ARE PLACED BETWEEN LAYERS OF PACKING TRAY INSIDE CARTON BOX
(INCLUDE THE UPPERMOST AND LOWERMOST TRAY)

					REV. : 6		PAGE : 7	
ORIGINATED BY TONY YUAN DATE 2025-05-08		TITLE 2X4 2.5 gigabit MagJack® WITH UPPER AND LOWER LED (8 Cores, Extended Temp.) PATENTED	PART NO. / DRAWING NO. 0879-2B4J-JE		STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.	
DRAWN BY PETER QIU DATE 2025-05-08			FILE NAME 0879-2B4J-JE_6.DWG		.X		UNIT : INCH [mm]	
					.XX		SCALE : N/A	
					.XXX		±0.005	
							SIZE : A4	
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