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PRELIMINARY

RoHS



ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

TP1	1CT : 1CT
TP2	1CT : 1CT
TP3	1CT : 1CT
TP4	1CT : 1CT

INS. LOSS (MAX)

1MHz TO 20MHz	-0.8 dB
50MHz	-1.0 dB
200MHz	-1.2 dB
400MHz	-2.0 dB
500MHz	-3.0 dB

RET. LOSS (MIN) @ 100 OHMS

1MHz $\leq f \leq 40MHz$	16 dB MIN
40MHz <math>< f \leq 400MHz</math>	16-10LOG(f/40MHz) dB
400MHz <math>< f \leq 500MHz</math>	6-30LOG(f/400MHz) dB

CM TO CM REJ

1MHz - 500MHz	-25 dB MIN
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CM TO DM REJ

1MHz - 500MHz	-25 dB MIN
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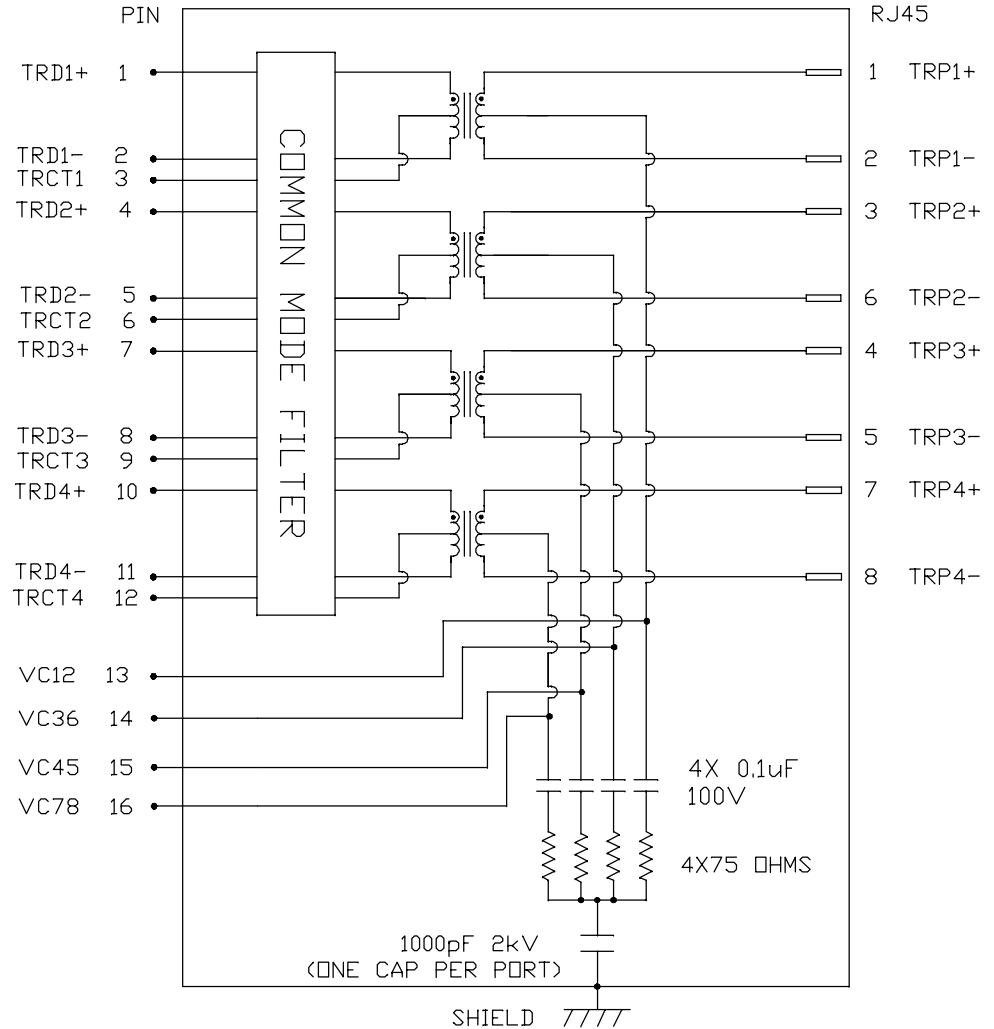
HIPOT (Isolation Voltage): 2250VDC

100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

BALANCED DC LINE CURRENT 600mA MAX. CONTINUOUS,
1.2A MAX. FOR 200 MILLISECONDS.

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

SCHEMATIC



ORIGINATED BY CHOW WANCHUNG	TITLE 2X2 10 Gigabit MagJack® 4PPoE, 60W PRESS FIT PATENTED
DATE 2021-05-31	
DRAWN BY TANG YUAN	
DATE 2021-05-31	

PART NO. / DRAWING NO. G53-48NV-011B	STANDARD DIM. TOL. IN INCH [] METRIC DIM. AS REF.
FILE NAME G53-48NV-011B_1.DWG	

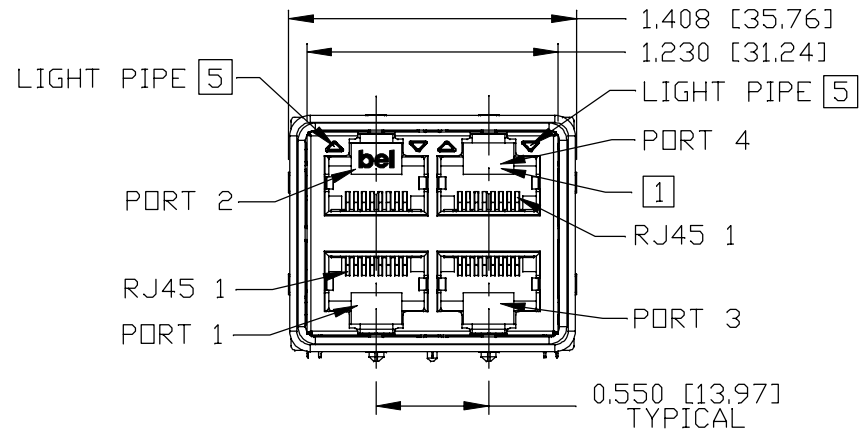
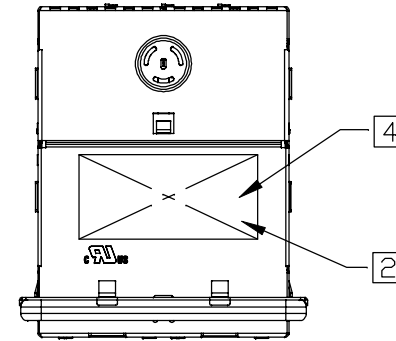
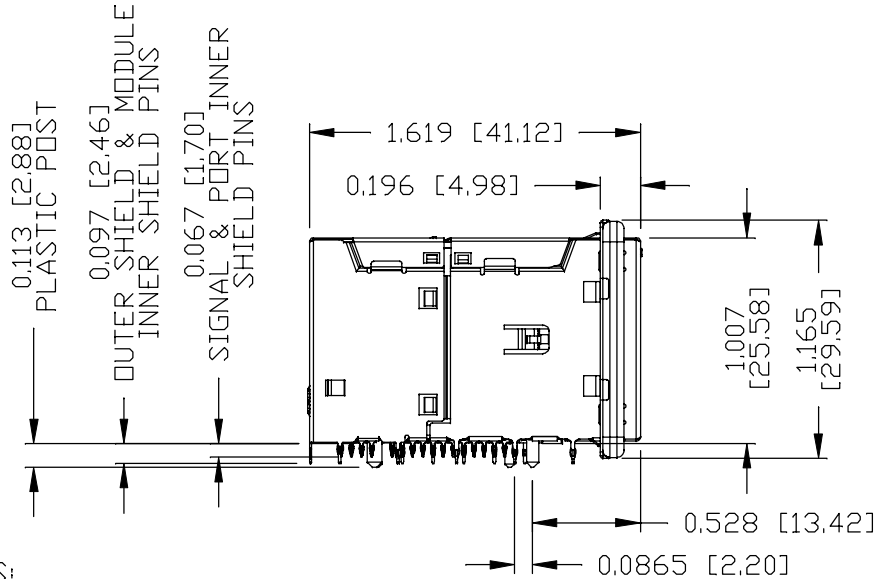
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NOTES:

- PLASTIC HOUSING: THERMOPLASTIC PA, BLACK. FLAMMABILITY RATING UL 94V-0
- CONTACT PLATING: 50 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT
- OUTPUT PINS: NICKEL PLATED ON COPPER ALLOY PRESS FIT PINS
- METAL SHIELD: NICKEL OR TIN PLATED ON COPPER ALLOY.

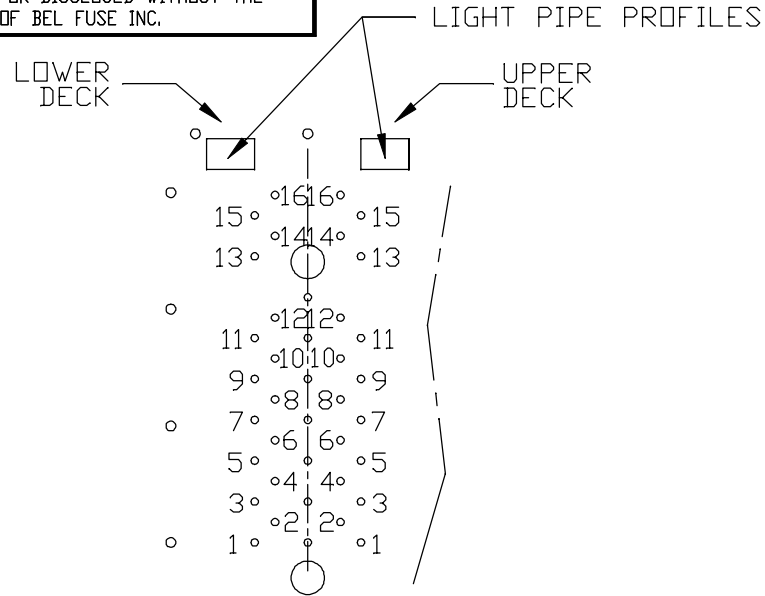
- [1] JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS, PART 68 SUBPART F.
- [2] MARK PART WITH MFG LOGO, NAME, PART NUMBER AND DATE CODE.
- [3] THE PRODUCT IS RoHS COMPLIANT.
- [4] THE PRODUCT IS PATENTED, "PATENTED" MARKING IS ON THE TOP SURFACE. THE PATENT NUMBER ARE U.S. PAT. 7,429,195 & U.S. PAT. 6,840,817 AND U.S. PAT. 7,924,130 AND U.S. PAT. 7,123,117
- [5] THE FINISHED GOODS IS WITHOUT SMD LED. THE SMD LED IS PROVIDED BY CUSTOMER HERSELF, AND THE SMD LED IS MOUNTED ON CUSTOMER PCB.
- [6] RECOMMENDED MINIMUM CUSTOMER PCB THICKNESS IS 0.080 INCH.

ORIGINATED BY ANTON LIAO DATE 2021-05-31		TITLE 2X2 10 Gigabit MagJack® 4PPoE, 60W PRESS FIT PATENTED		PART NO. / DRAWING NO. G53-48NV-011B FILE NAME G53-48NV-011B_1.DWG		STANDARD DIM. TOL. IN INCH .X .XX .XXX ±0.010		[] METRIC DIM. AS REF. UNIT : INCH [mm] SCALE : N/A SIZE : A4		REV. : 1	PAGE : 3
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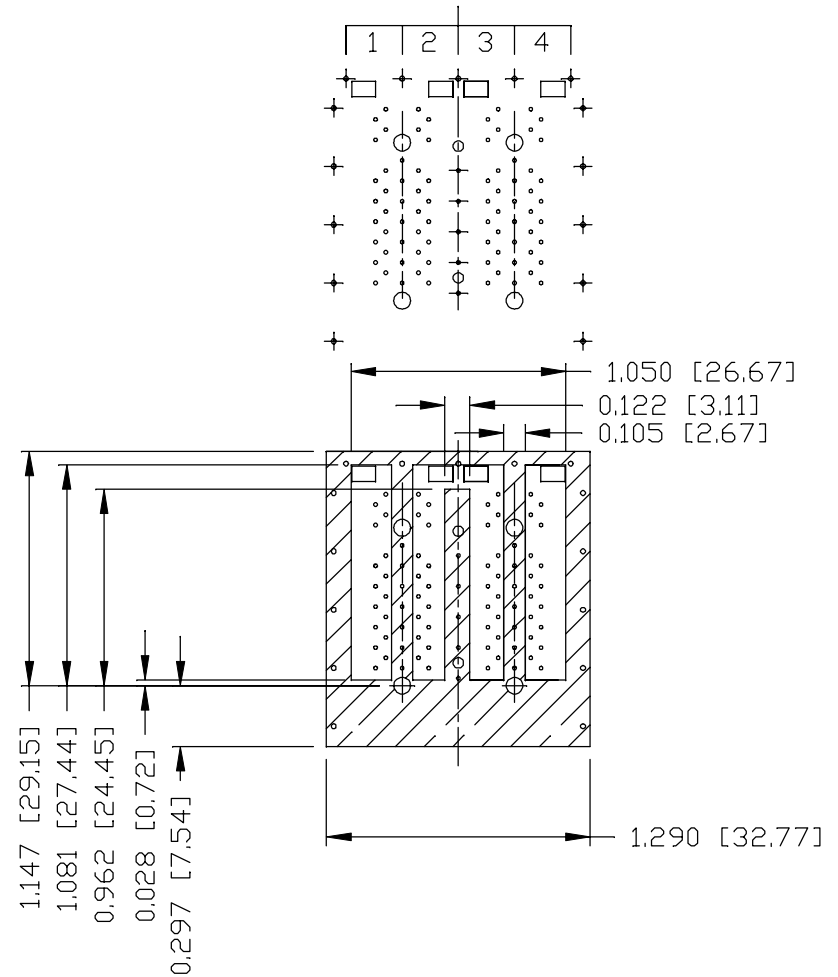
PRELIMINARY



PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)

10	TRD4+		
9	TRCT3		
8	TRD3-		
7	TRD3+		
6	TRCT2	16	VC78
5	TRD2-	15	VC45
4	TRD2+	14	VC36
3	TRCT1	13	VC12
2	TRD1-	12	TRCT4
1	TRD1+	11	TRD4-

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
ANTON LIAO
DATE 2021-05-31
DRAWN BY
SANDY LIN
DATE 2021-05-31

TITLE
2X2 10 Gigabit MagJack®
4PPoE, 60W
PRESS FIT
PATENTED

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FILE NAME
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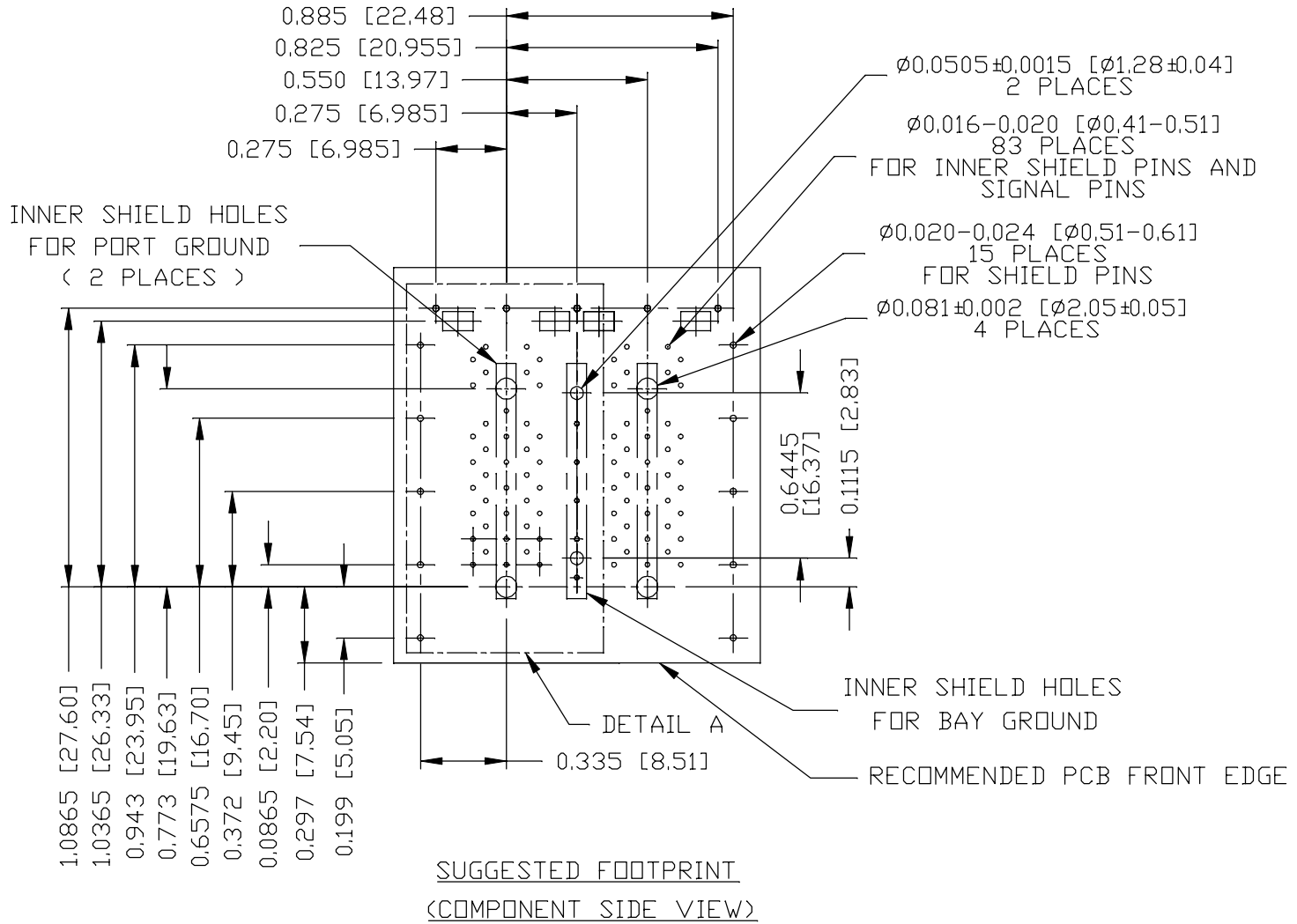
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SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)

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DRAWN BY SANDY LIN DATE 2021-05-31

TITLE 2X2 10 Gigabit MagJack® 4PPoE, 60W PRESS FIT PATENTED

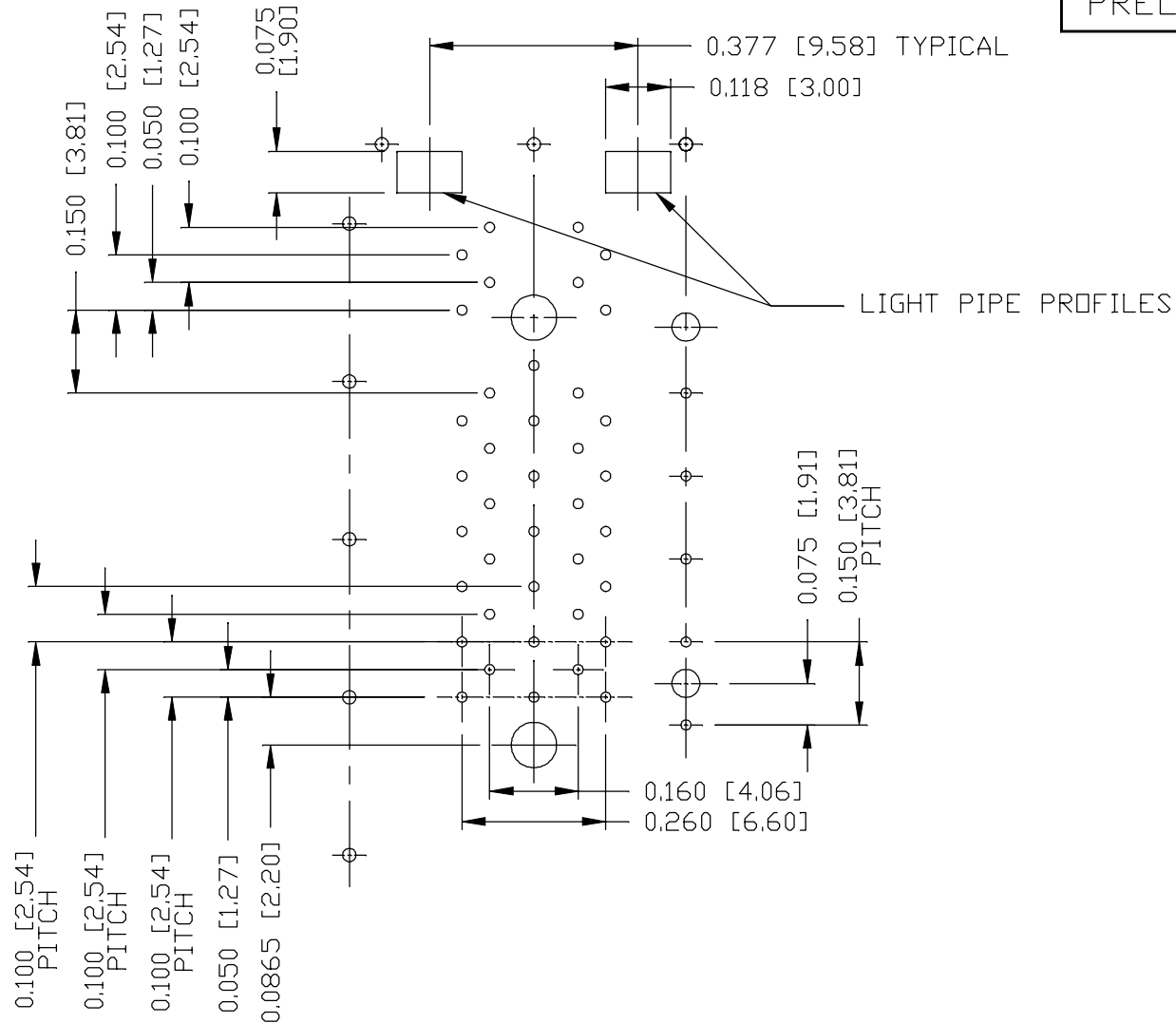
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.XXX ±0.004	SIZE : A4

bel MAGNETIC SOLUTIONS
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PRELIMINARY



DETAIL A

REV. : 1 PAGE : 6

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DATE 2021-05-31

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4PPoE, 60W
PRESS FIT
PATENTED

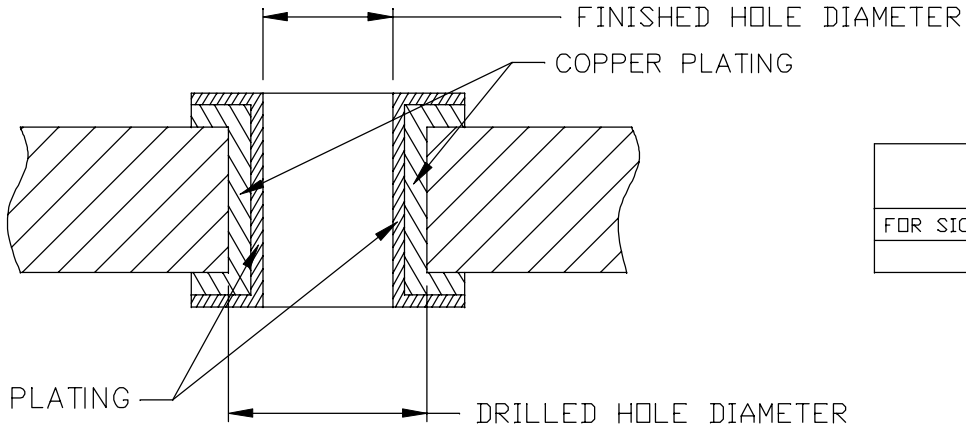
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PLATED-THROUGH-HOLE	DRILLED HOLE DIAMETER	FINISHED HOLE DIAMETER
FOR SIGNAL PINS AND INNER SHIELD PINS	0.022 [0.57]	0.016-0.020 [0.41-0.51]
FOR SHIELD PINS	0.026 [0.66]	0.020-0.024 [0.51-0.61]

PLATED-THROUGH-HOLE CROSS-SECTION

PLATING	THICKNESS IN MICRO-INCHES [MICRONS]
COPPER	1000-2000 [25-50]
TOP PLATING - USE ONE OPTION LISTED BELOW:	
HOT AIR SOLDER LEVELING (HASL) TIN-LEAD (Sn-Pb)	160-400 [4-10]
IMMERSION TIN (Sn)	20-40 [0.5-1.0]
ORGANIC SOLDERABILITY PRESERVATIVE (OSP)	10-20 [0.2-0.5]
IMMERSION GOLD (Au) OVER NICKEL (Ni) (ENIG)	5-20 [0.1-0.5] (Au) OVER 50-100 [1.2-2.5] (Ni)
TIN-LEAD (Sn-Pb)	400-1000 [10-25]
IMMERSION SILVER (Ag)	5-8 [0.10-0.15]

RECOMMENDED PLATED-THROUGH-HOLE CONSTRUCTION DETAILS FOR PRESS-FIT PINS

REV. : 1 PAGE : 7

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SANDY LIN
DATE 2021-05-31

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4PPoE, 60W
PRESS FIT
PATENTED

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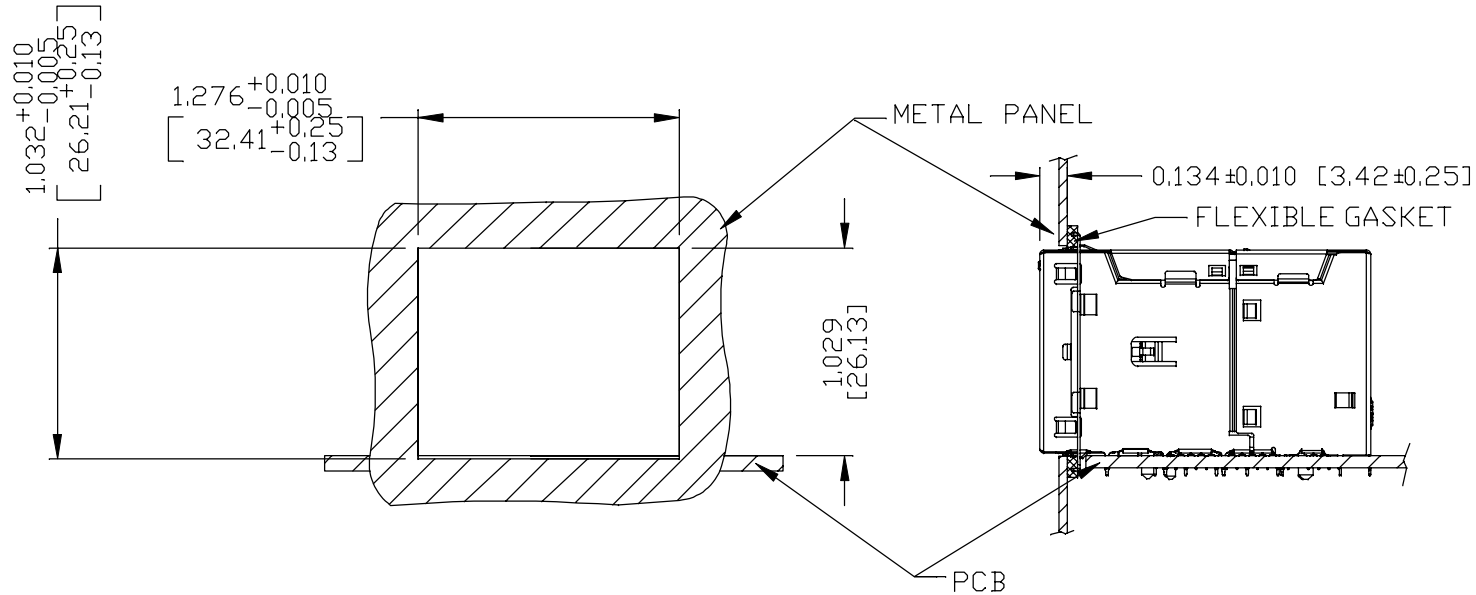
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SUGGESTED PANEL OPENING

PRELIMINARY



NOTE:

1. 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.
2. RECOMMENDED FLEXIBLE GASKET THICKNESS BEFORE COMPRESSION IS 0.103 INCH.
3. THE FLEXIBLE GASKET CAN BE ORDERD SEPARATELY VIA PART NUMBER 0080M1700-06.

PACKING INFORMATION

PACKING TRAY : 0200M9999-L9 (TOP)

0200M9999-Q8 (BOTTOM)

PACKING QUANTITY : 15 PCS FINISHED GOODS PER TRAY.

7 TRAYS (105 PCS FINISHED GOODS) PER CARTON BOX.

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

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