RoHS

POWER | PROTECT | CONNECT

DOCUMENT / PART NO.: G18-B8NV-010N

TITLE : PRODUCT SPECIFICATION

ISSUE	DESCRIPTION OF CHANGE	REVIEWED BY	APPROVED BY	ECN#
1	PRELIMINARY	TONY YUAN		

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REV.	1	1	1	1	1	1	1	1										
PAGE																		
REV.																		

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ELECTRICAL CHARACTERISTICS @ 25°C

TURNS 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 ≤ f ≤ 40MHz	16 dB MIN
40MHz < f ≤400MHz	16-10LOG(f/40MHz) dB
400MHz < f ≤500MHz	6-30LOG(f/400MHz) dB

CM TO CM REJ

1MHz - 500MHz	-25 dB MIN

CM TO DM REJ

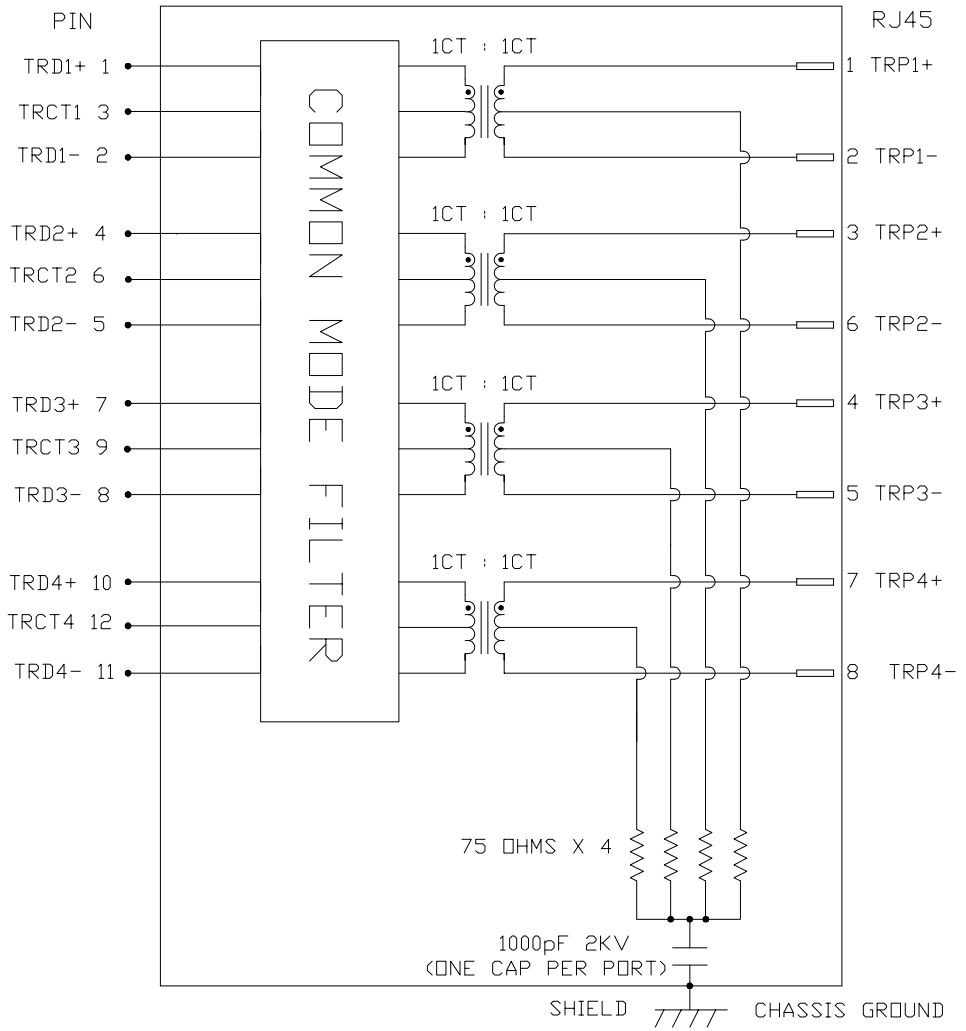
1MHz - 500MHz	-30 dB MIN

HIPOT (Isolation Voltage): 2250VDC

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

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

SCHEMATIC



REV. : 1 | PAGE : 2

ORIGINATED BY: BILL LIU DATE: 2024-07-18	TITLE: 2X6 10 Gigabit MagJack® PRESS FIT PATENTED	PART NO. / DRAWING NO.: G18-B8NV-010N FILE NAME: G18-B8NV-010N_1.DWG	STANDARD DIM. TOL. IN INCH: .X, .XX, .XXX [ ] METRIC DIM. AS REF. UNIT : INCH [mm] SCALE : N/A SIZE : A4
DRAWN BY: TERRY LIN DATE: 2024-07-18			

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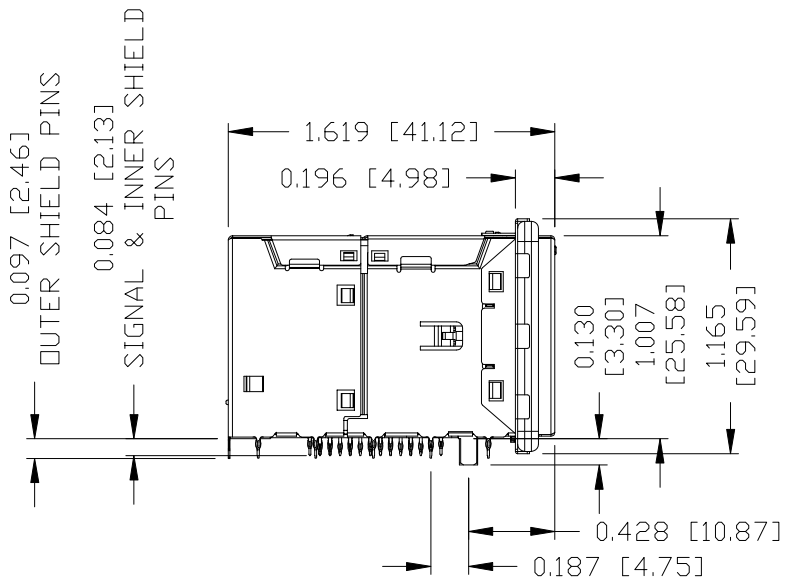

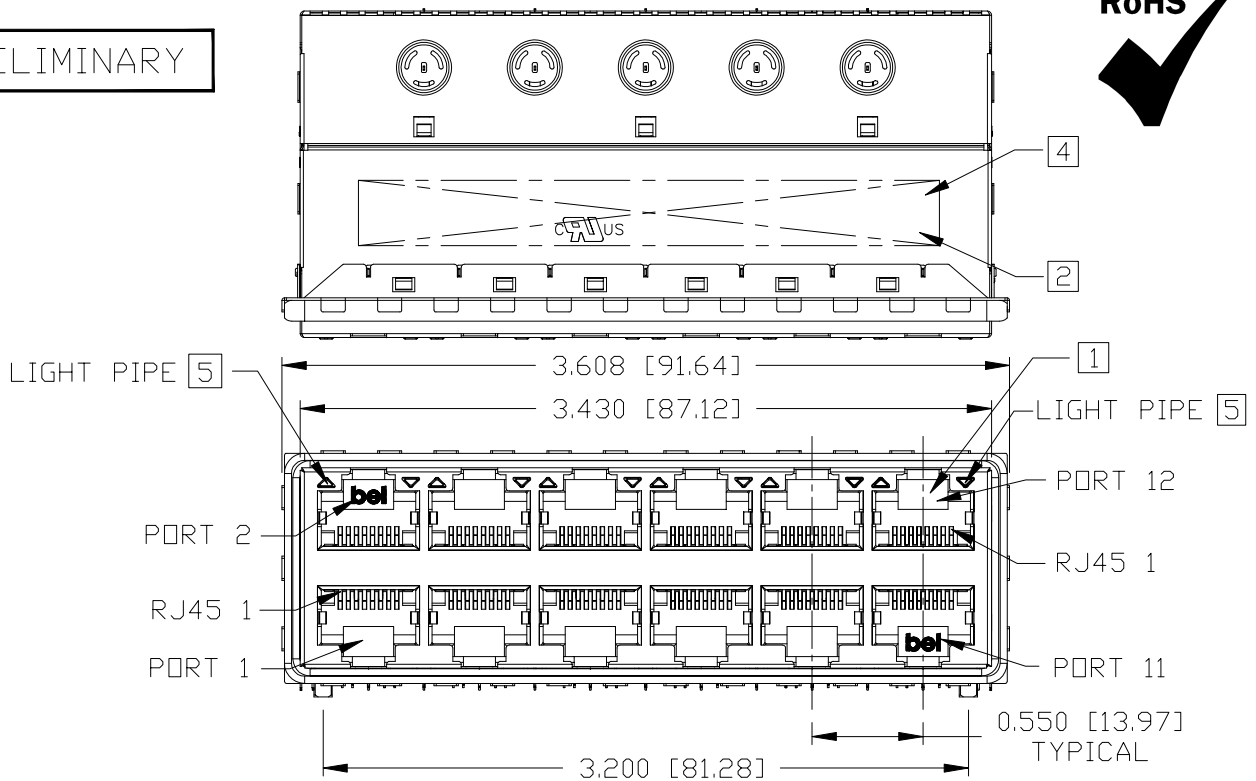

NOTES:

PLASTIC HOUSING: THERMOPLASTIC LCP, 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.

c UL us UL RECOGNIZED - FILE #E169987.

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 & U.S. PAT. 7,924,130. & 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. RECOMMNENDED MINIMUM CUSTOMER PCB THICKNESS IS 0.080 INCH.
7. DATUM C AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

REV. : 1	PAGE : 3

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DRAWN BY: RICK LI DATE: 2024-07-18			

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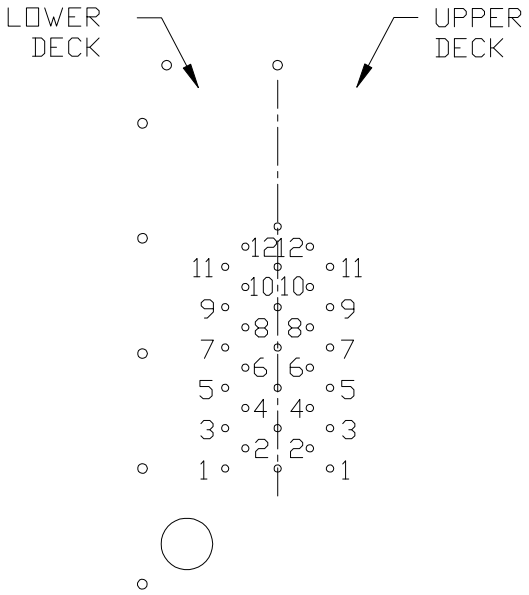
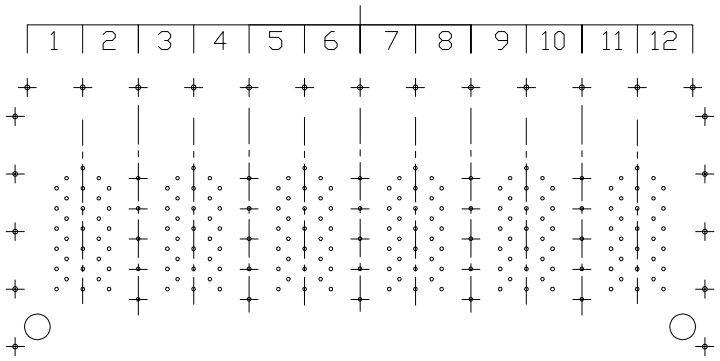
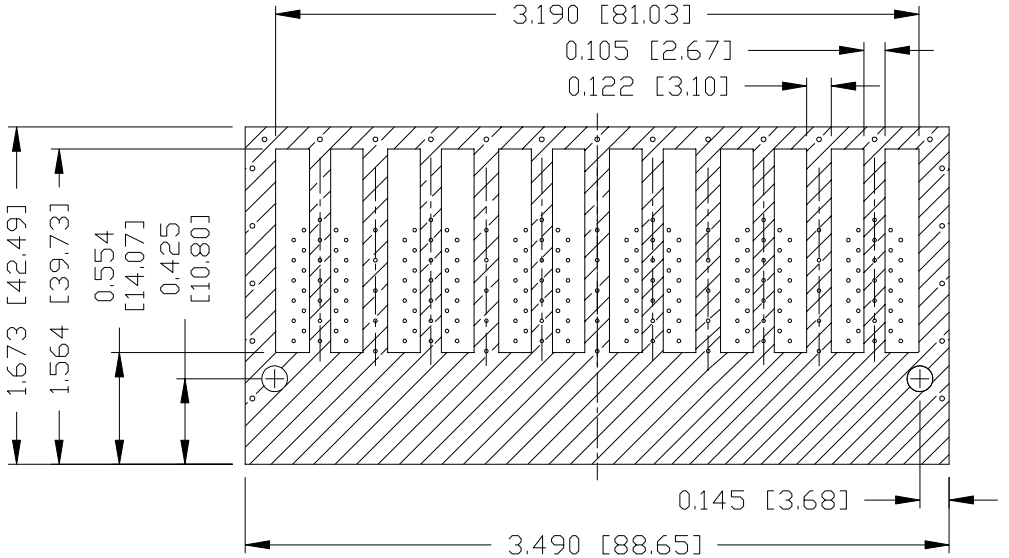


PORT ASSIGNMENT
(COMPONENT SIDE VIEW)





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

PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)

10	TRD4+		
9	TRCT3		
8	TRD3-		
7	TRD3+		
6	TRCT2		
5	TRD2-		
4	TRD2+		
3	TRCT1		
2	TRD1-	12	TRCT4
1	TRD1+	11	TRD4-

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ORIGINATED BY
TONY YUAN
DATE 2024-07-18

DRAWN BY
RICK LI
DATE 2024-07-18

TITLE
2X6 10 Gigabit MagJack®
PRESS FIT
PATENTED

PART NO. / DRAWING NO.
G18-B8NV-010N

FILE NAME
G18-B8NV-010N_1.DWG

STANDARD DIM. TOL. IN INCH
.X
.XX
.XXX ±0.004

[ ] METRIC DIM. AS REF.
UNIT : INCH [mm]
SCALE : N/A
SIZE : A4

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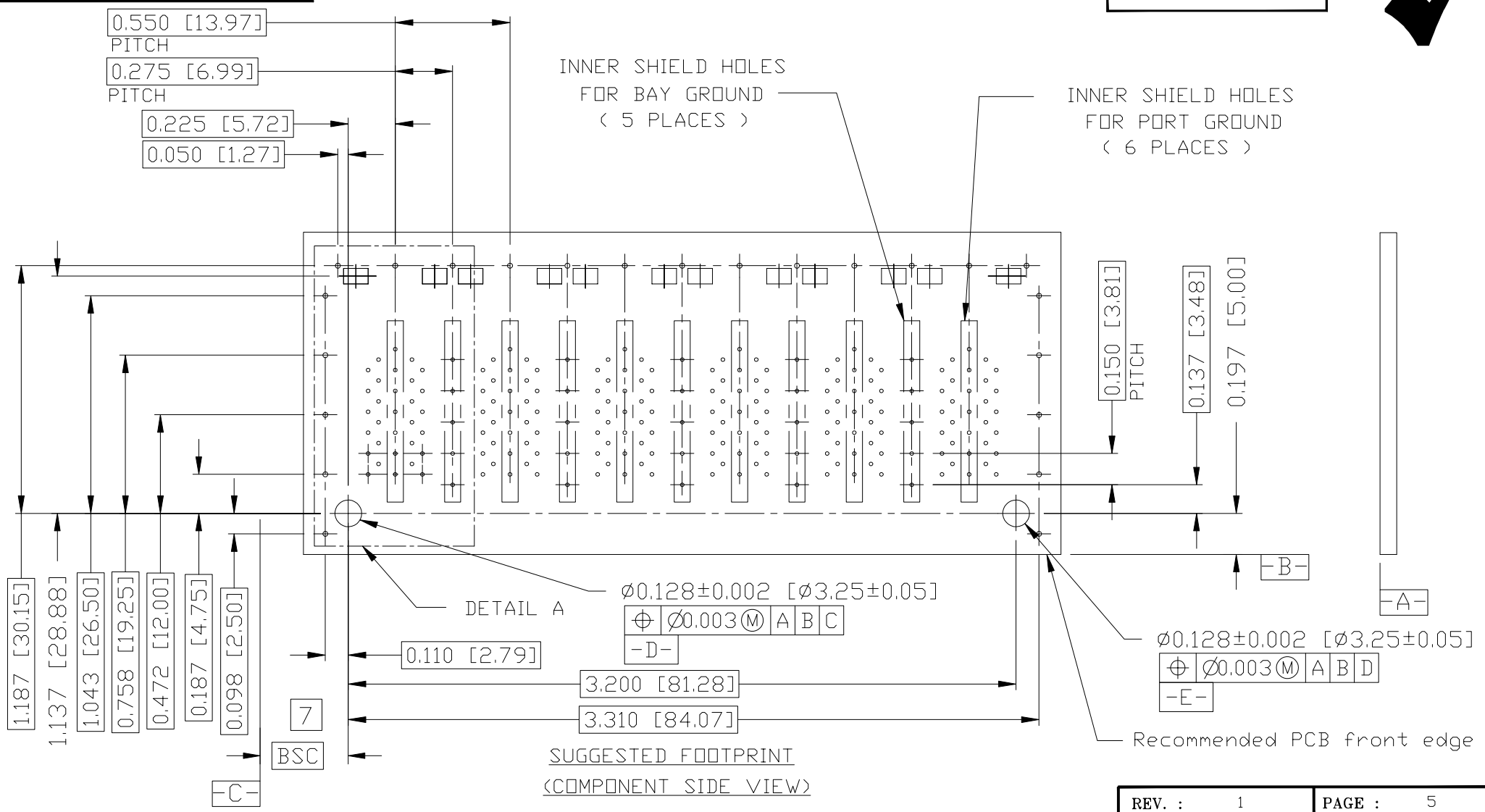

ORIGINATED BY: TONY YUAN DATE: 2024-07-18	TITLE: 2X6 10 Gigabit MagJack® PRESS FIT PATENTED	PART NO. / DRAWING NO.: G18-B8NV-010N	REV. : 1
DRAWN BY: RICK LI DATE: 2024-07-18		FILE NAME: G18-B8NV-010N_1.DWG	PAGE : 5

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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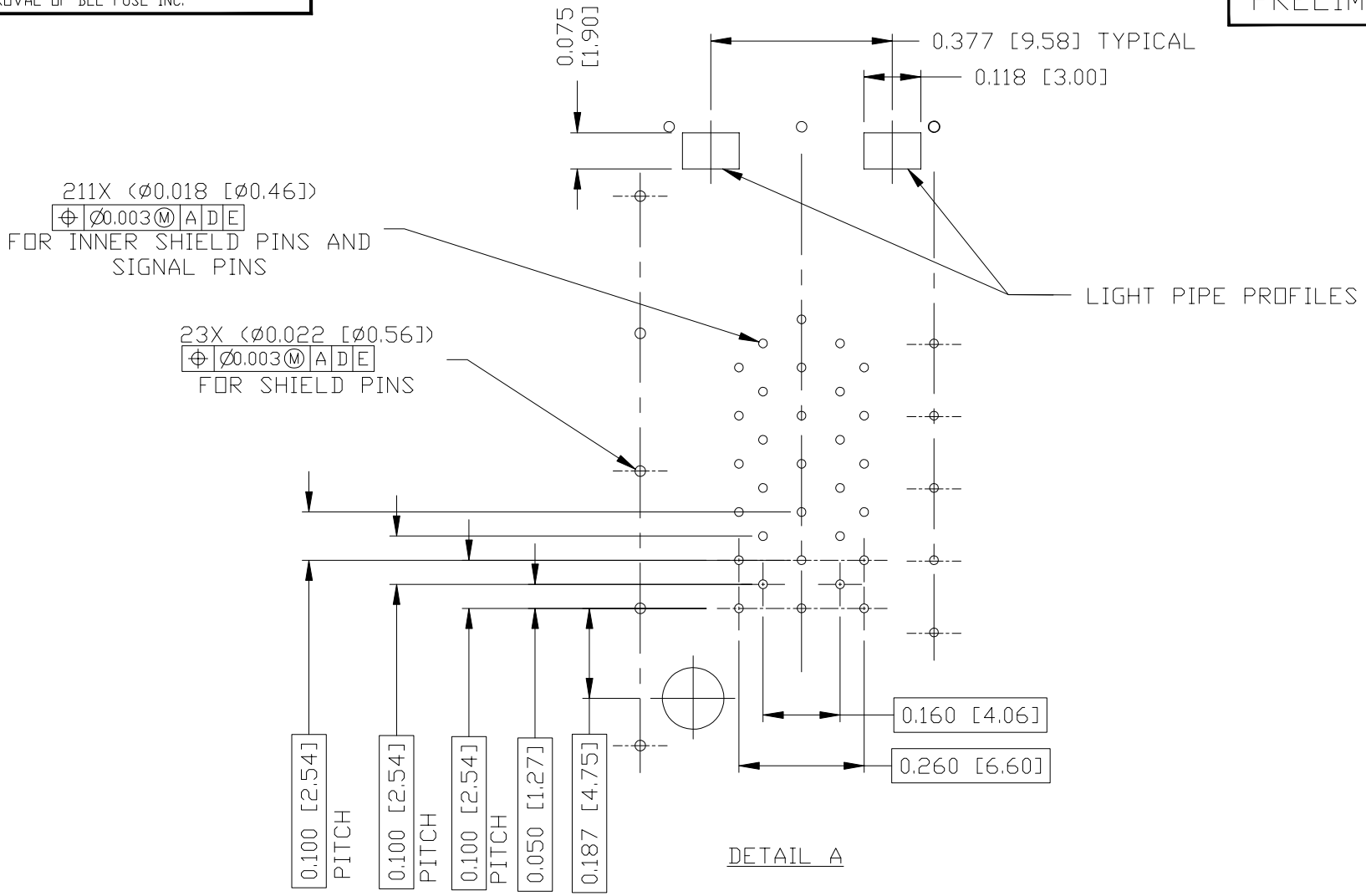

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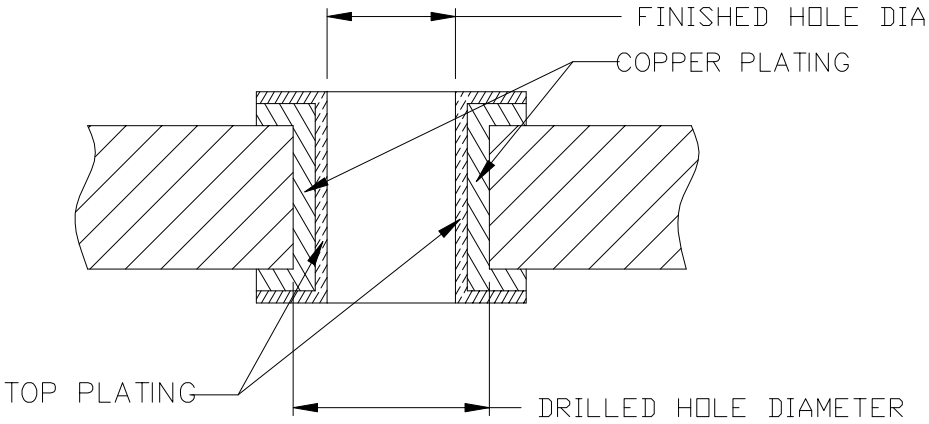

PLATED-THROUGH-HOLE	DRILLED HOLE DIAMETER	FINISHED HOLE DIAMETER
FOR SIGNAL PINS AND INNER SHIELD PINS	0.022 [0.57]	(0.018 [0.46]) REF
FOR SHIELD PINS	0.026 [0.66]	(0.022 [0.56]) REF

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 PRESERVITAVE (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

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DRAWN BY RICK LI DATE 2024-07-18		FILE NAME G18-B8NV-010N_1.DWG	[ ] METRIC DIM. AS REF. UNIT : INCH [mm] SCALE : N/A SIZE : A4

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SUGGESTED PANEL OPENING

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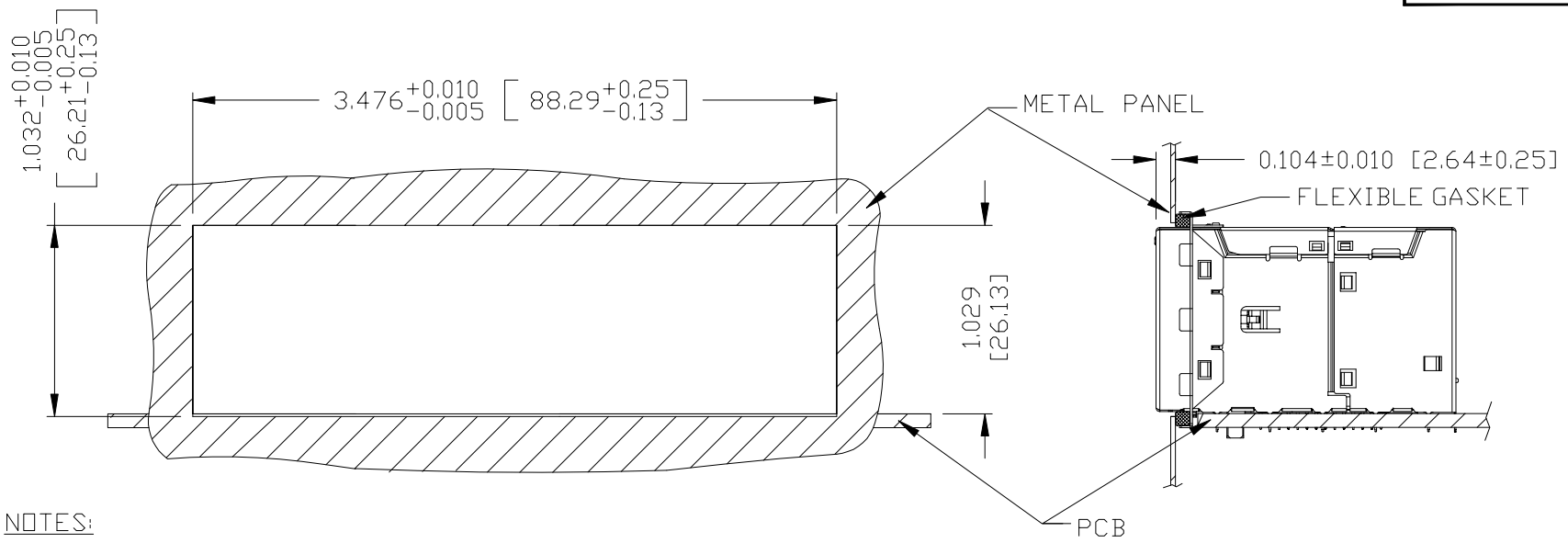

NOTES:

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 COMPRESSION OF THE FLEXIBLE GASKET MATERIAL OF 25%.
3. RECOMMENDED FLEXIBLE GASKET THICKNESS BEFORE COMPRESSION IS 0.103 INCH.
4. THE FLEXIBLE GASKET CAN BE ORDERD SEPARATELY VIA PART NUMBER 0080M1700-07.

PACKING INFORMATION

PACKING TRAY : 0200M9999-M5 (TOP)
0200M9999-M4 (BOTTOM)
PACKING QUANTITY : 9 PCS FINISHED GOODS PER TRAY.
7 TRAYS (63 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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