

POWER | PROTECT | CONNECT

DOCUMENT / PART NO.: G23-21YR-112J

TITLE : PRODUCT SPECIFICATION

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

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LED 2 & 4 POLARITY			LED 1 & 3 POLARITY		
PIN 13	PIN 14	COLOR	PIN 15	PIN 16	COLOR
+	-	YELLOW	+	-	GREEN
-	+	ORANGE	-	+	ORANGE

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) _FORM TESTING

1MHz	-20 dB
2MHz	-20 dB
100MHz	-20 dB
200MHz	-17 dB
300MHz	-13 dB
400MHz	-10 dB
500MHz	-6 dB

CM TO DM REJ

1MHz - 500MHz -30 dB MIN

HIPOT (Isolation Voltage): 2250VDC

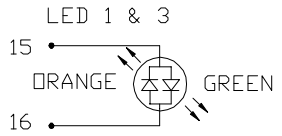
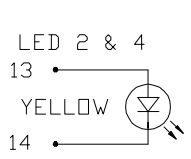
100% OF PRODUCTION TESTED TO COMPLY WITH IEEE 802.3 ISOLATION REQUIREMENTS.

LED COLOR

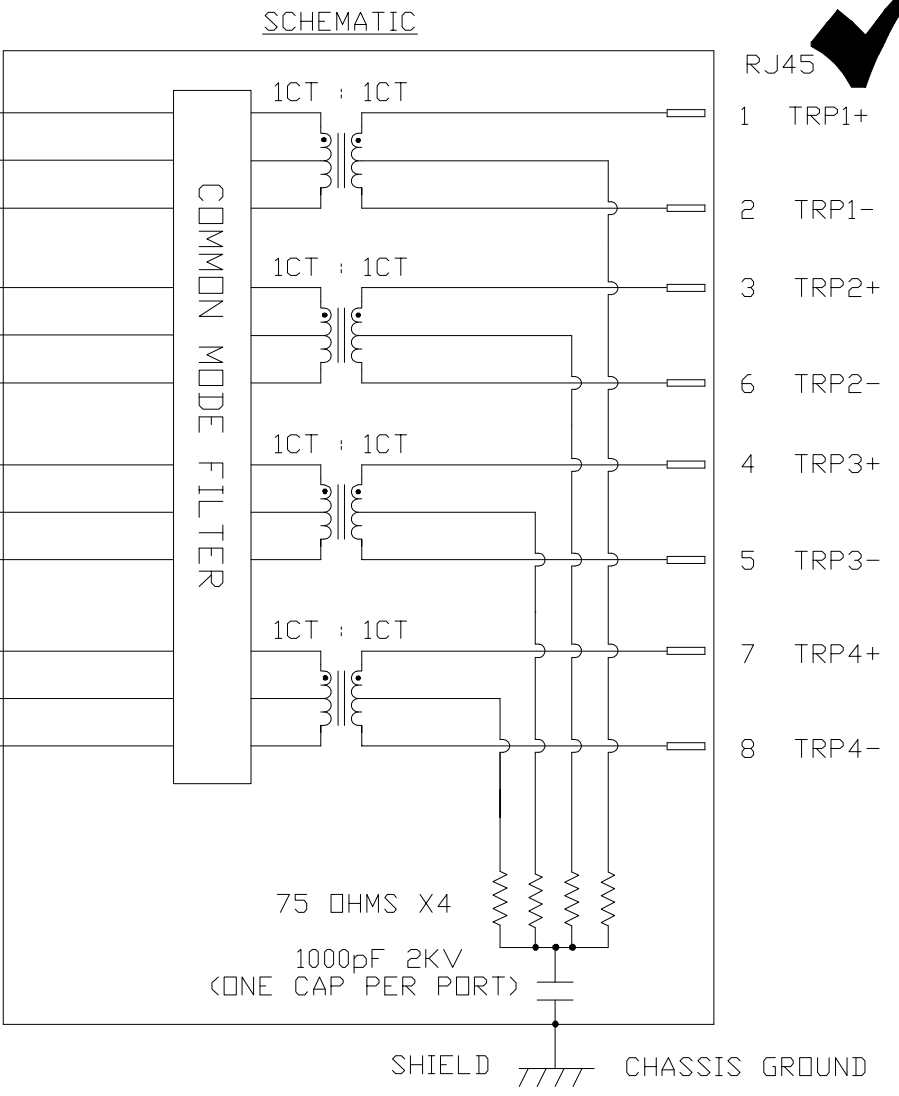
VF (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
		ORANGE	2.0V TYP.
AD (DOMINANT WAVELENGTH)	IF=20mA	GREEN	570nm TYP.
		ORANGE	605nm TYP.

VF (FORWARD VOLTAGE)	IF=20mA	YELLOW	2.1V TYP.
AD (DOMINANT WAVELENGTH)	IF=20mA	YELLOW	590nm TYP.

OPERATING TEMPERATURE: 0°C TO +70°C.



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



ORIGINATED BY
BILL LIU
DATE 2024-08-22

DRAWN BY
ZOU PEILONG
DATE 2024-08-22

TITLE

2X1 10 Gigabit MagJack®

PATENTED

PART NO. / DRAWING NO.
G23-21YR-112J

FILE NAME
G23-21YR-112J_1.DWG

STANDARD DIM.
TOL. IN INCH

[] METRIC DIM.
AS REF.

UNIT : INCH [mm]

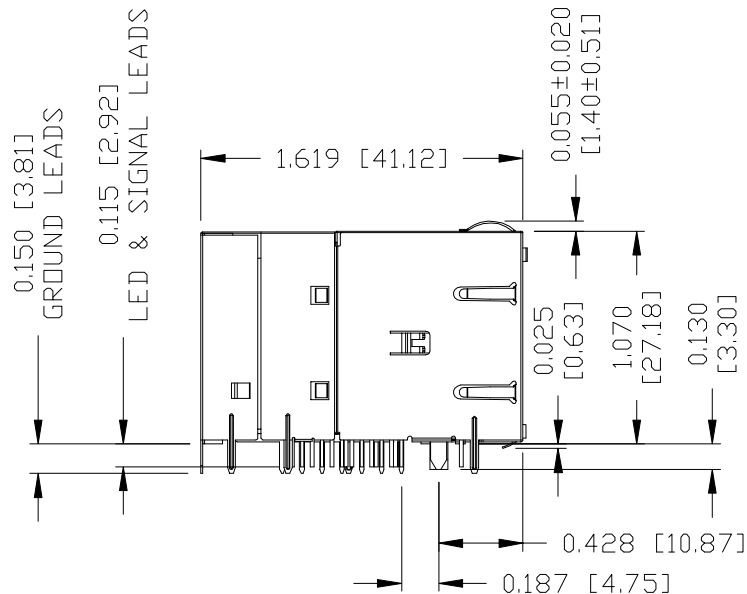
SCALE : N/A

SIZE : A4

REV. : 1 PAGE : 2

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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)

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- Technical drawing of the front and rear views of the CTA-1000 device, showing dimensions and component labels.
- Front View (Top):**
- LED 1: BI-COLOR GREEN/ORANGE (Label 1)
 - LED 2: YELLOW (Label 2)
 - PORT 2: RJ45 1 (Label 1)
 - PORT 1: RJ45 1 (Label 1)
 - LED 4: YELLOW (Label 1)
 - LED 3: BI-COLOR GREEN/ORANGE (Label 1)
- Dimensions:**
- 0.055 ± 0.020 [1.40 ± 0.51]
 - 0.676 [17.17]
 - 0.450 [11.43]
- Other Labels:**
- CTA-1000
 - bel

3. THE PRODUCT IS RoHS COMPLIANT
 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. 7,123,117 AND U.S. PAT. 7,924,130.
5. THE AXIAL RETENTION FORCE OF RJ PORT IS 15LBS MIN.
6. 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 2024-08-22	TITLE 2X1 10 Gigabit MagJack® PATENTED	PART NO. / DRAWING NO. G23-21YR-112J	STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.	
DRAWN BY CLOUD ZENG DATE 2024-08-22		FILE NAME G23-21YR-112J_1.DWG	.X		UNIT : INCH [mm]	
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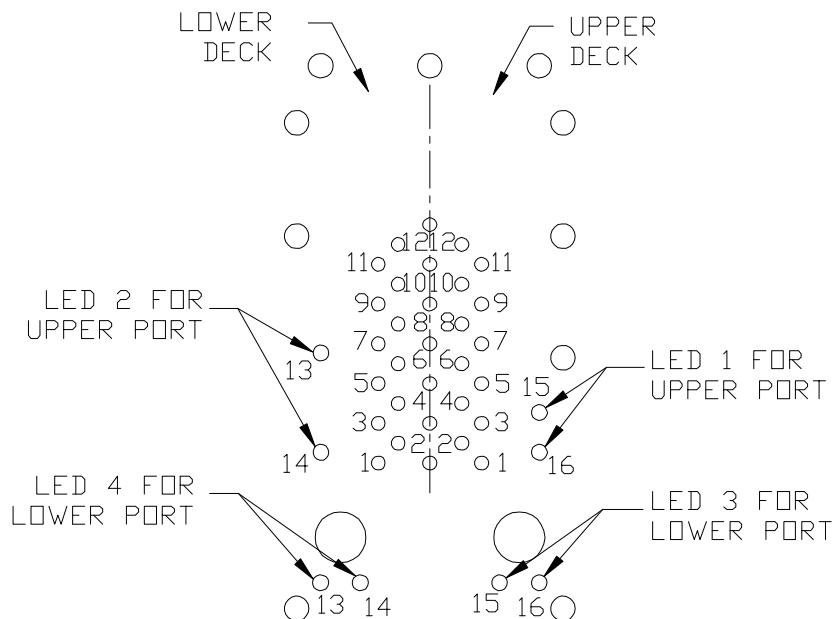
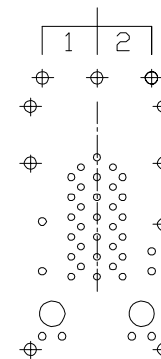


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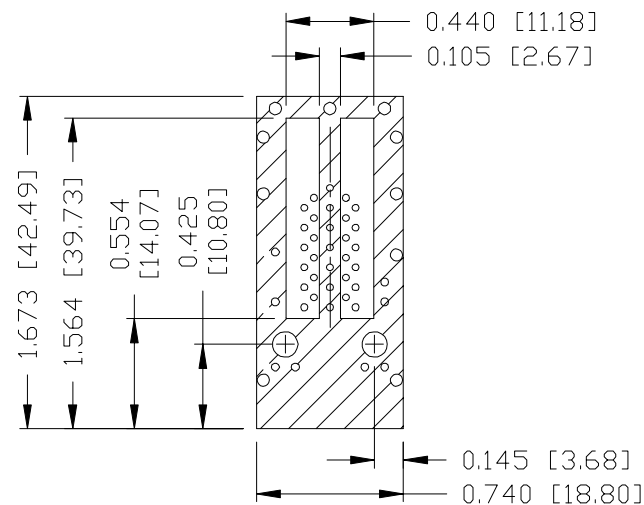


PORT ASSIGNMENT
(COMPONENT SIDE VIEW)



PIN-OUT INFORMATION
(COMPONENT SIDE VIEW)

10	TRD4+		
9	TRCT3		
8	TRD3-		
7	TRD3+		
6	TRCT2	16	ORANGE(+)/GREEN(-)
5	TRD2-	15	ORANGE(-)/GREEN(+)
4	TRD2+	14	YELLOW (-)
3	TRCT1	13	YELLOW (+)
2	TRD1-	12	TRCT4
1	TRD1+	11	TRD4-



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

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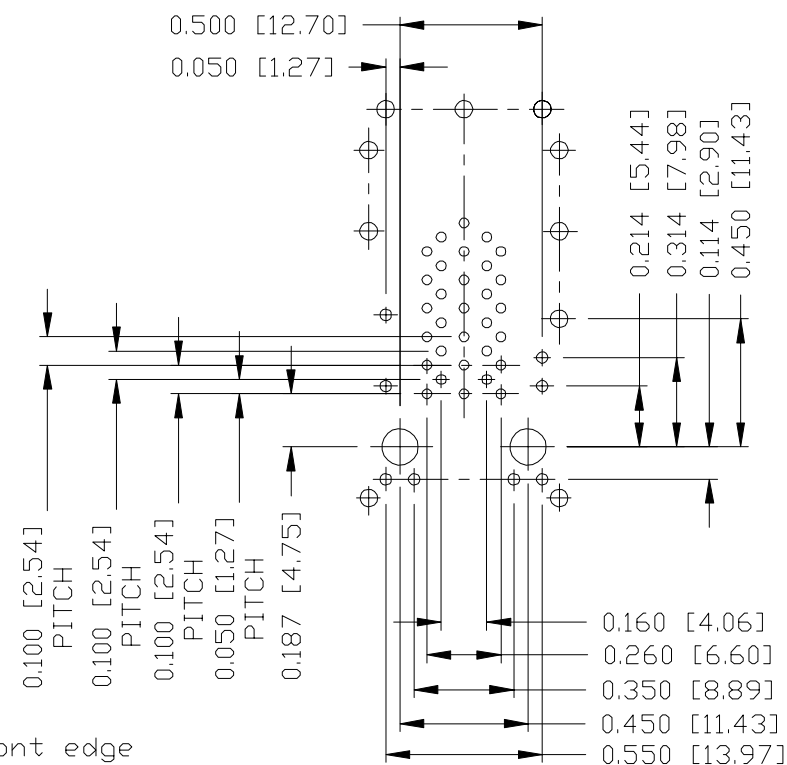
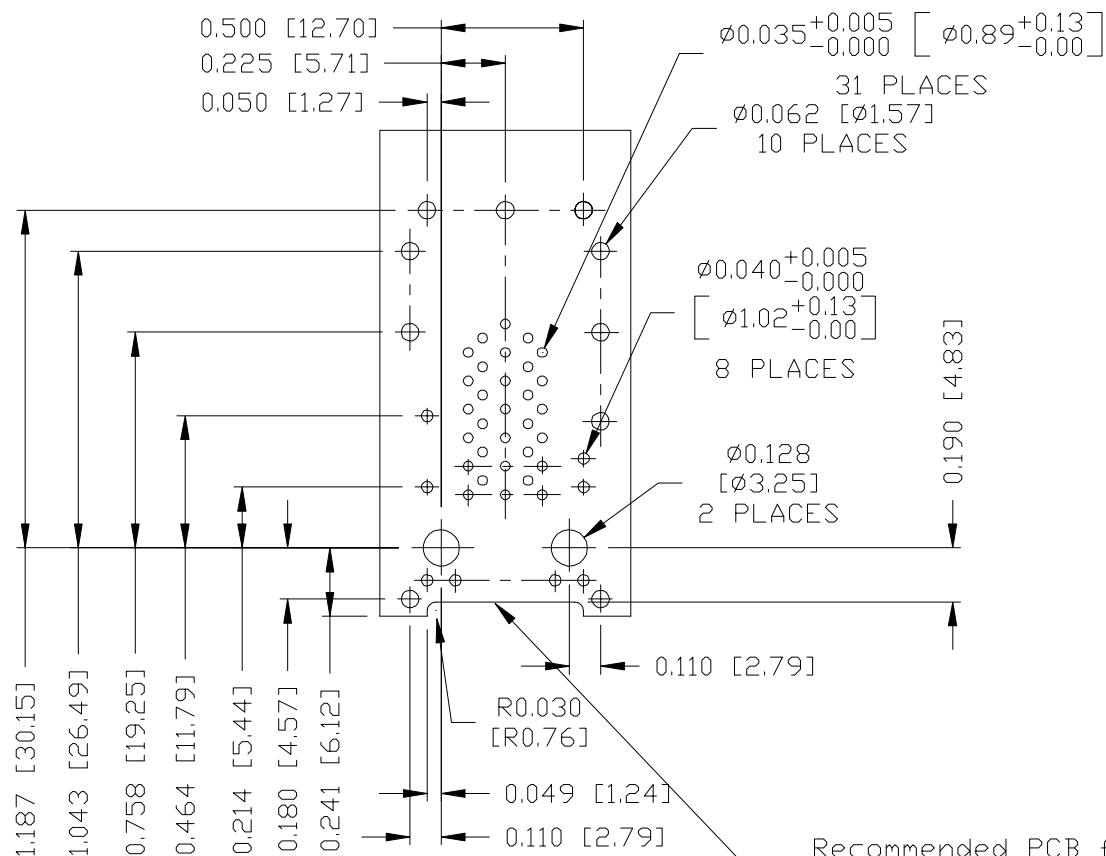
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REV. : 1 PAGE : 4



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Recommended PCB front edge
cutout. The bottom shield ground
tabs (front) should not be seated
on the top of the PCB.

SUGGESTED FOOTPRINT
(COMPONENT SIDE VIEW)

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.XX
.XXX

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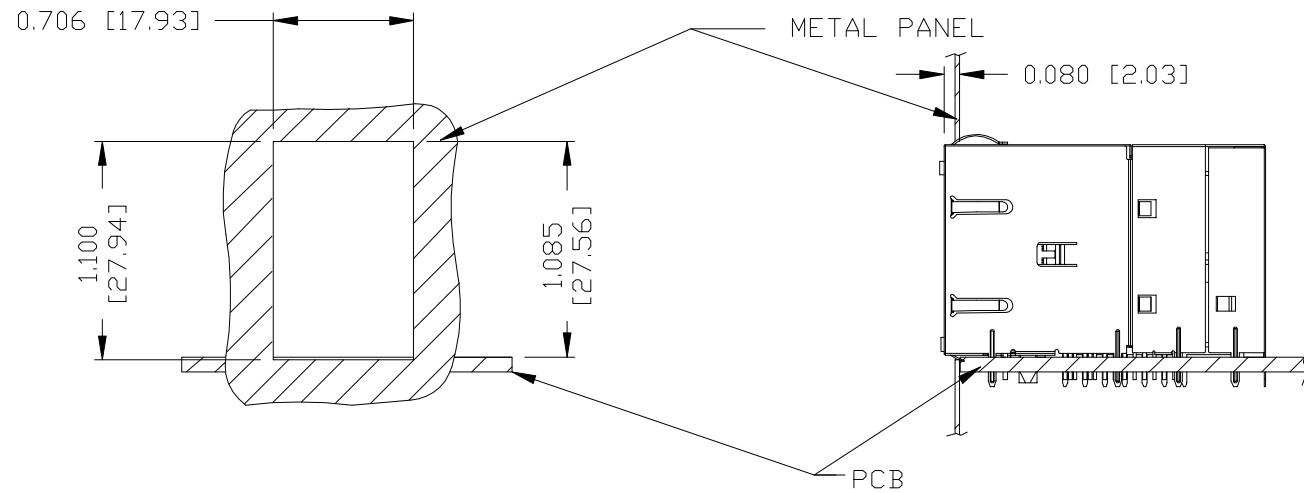


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SUGGESTED PANEL OPENING



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 : 0200M9999-P3 (TOP)
0200M9999-P2 (BOTTOM)

PACKING QUANTITY : 18 PCS FINISHED GOODS PER TRAY.
9 TRAYS (162 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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.XX		SCALE : N/A	
.XXX	±0.005		SIZE : A4

REV. : 1	PAGE : 6
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