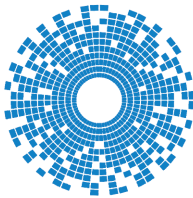




RoHS



bel

POWER | PROTECT | CONNECT

DOCUMENT / PART NO.: V890-1RX1-A1

TITLE : PRODUCT SPECIFICATION

ISSUE	DESCRIPTION OF CHANGE					REVIEWED BY					APPROVED BY					ECN#				
A	FIRST ISSUE					CHRIS NG					SHUN LEUNG 2006-04-15									
B	CHANGE JACK PORT LOGO FROM "BEL" TO "BEL STEWART"					ZX HUANG					SHUN LEUNG 2008-06-21					RD2080127				
C	ADD PATENTED INFORMATION AND UPDATE ROHS DESCRIPTION & OTHER GENERAL REQUIREMENT					ANTON LIAO					LEUNG WAI SHUN 2012-08-31					RD2120186				
D	UPDATE PRODUCT SPECIFICATION TO MEET GENERAL REQUIREMENT					ANTON LIAO					LEUNG WAI SHUN 2017-06-29					RD2170094				
E	MOVE THE UL LOGO FROM FRONT VIEW TO TOP VIEW					TONY YUAN					 WaiShun Leung 2025.10.17 14:09:48 +08'00'					RD2250045				
PAGE	1	2	3	4	5															
REV.	E	E	E	E	E															
PAGE																				
REV.																				

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LED1 POLARITY			LED2 POLARITY		
PIN 11	PIN 12	COLOR	PIN 13	PIN 14	COLOR
+	-	YELLOW	+	-	GREEN
-	+	GREEN			

ELECTRICAL CHARACTERISTICS @ 25°C

URNS RATIO

TP1	1CT : 1CT ±3%
TP2	1CT : 1CT ±3%
TP3	1CT : 1CT ±3%
TP4	1CT : 1CT ±3%

OC L @ 100kHz/100mVRMS

8mA DC BIAS	350 µH MIN.
-------------	-------------

INS. LOSS

1MHz TO 100MHz	-1.1 dB MAX
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RET. LOSS (MIN)

1MHz-40MHz	-18 dB
40MHz-100MHz	-12+20LOG(F/80MHz) dB

CM TO CM REJ

1MHz - 100MHz	-20 dB MIN
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CROSSTALK (TX - RX)

1MHz - 30MHz	-40 dB MIN
30MHz - 60MHz	-30 dB MIN

HIPOT (Isolation Voltage): 1500 Vrms
100% OF PRODUCTION TESTED TO COMPLY
WITH IEEE 802.3 ISOLATION REQUIREMENTS

LED 1

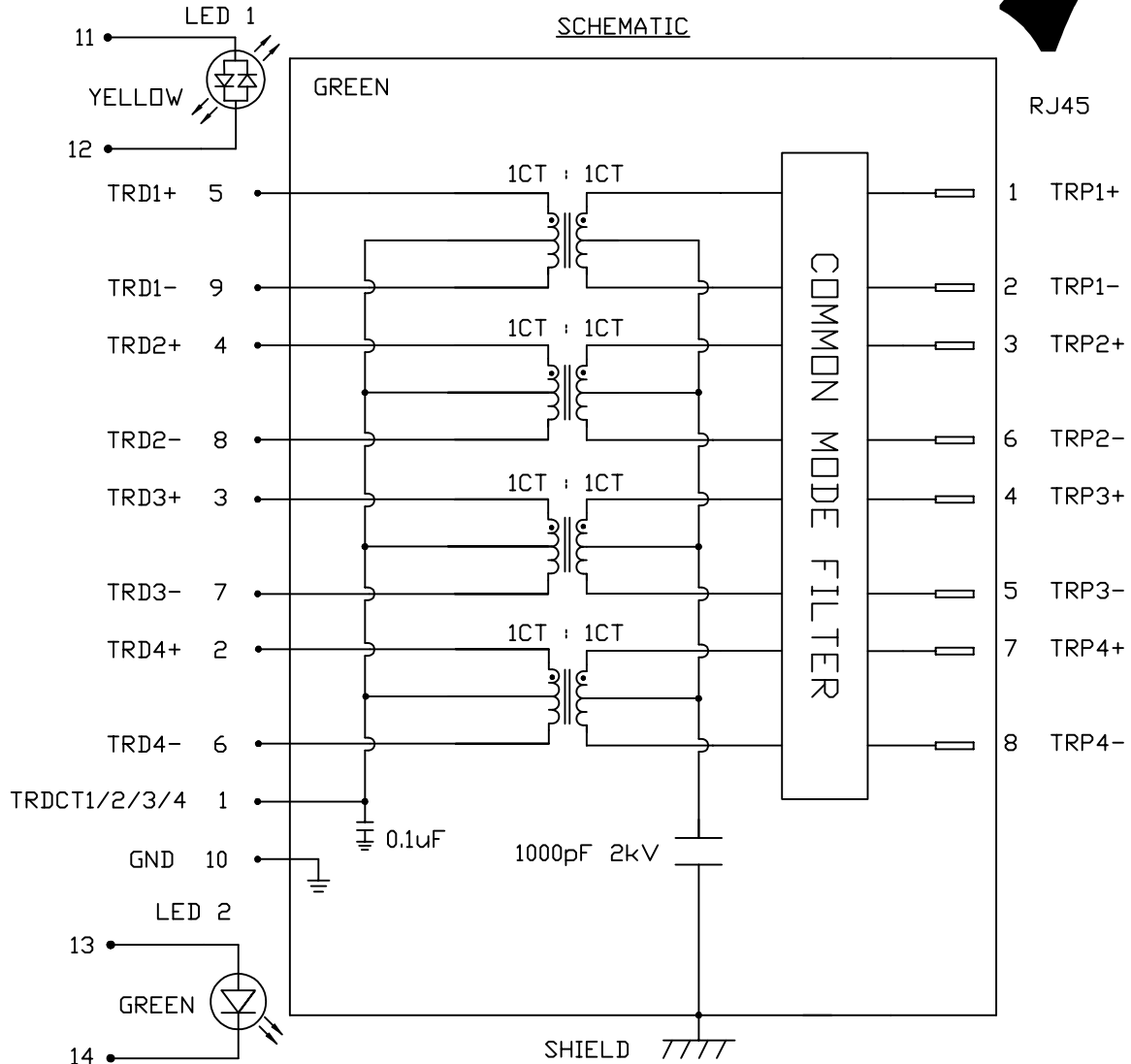
VF (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
		YELLOW	2.1V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA	GREEN	570nm TYP.
		YELLOW	590nm TYP.

LED 2

VF (FORWARD VOLTAGE)	IF=20mA	GREEN	2.2V TYP.
λD (DOMINANT WAVELENGTH)	IF=20mA	GREEN	570nm TYP.

OPERATING TEMPERATURE: 0°C TO +70°C.

RoHS



ORIGINATED BY
ILL LIU
ATE 2025-09-15

DRAWN BY
RANK LIU
ATE 2025-09-15

02(2)120214

TITLE
gigabit MagJack®
(8 core, Vertical)
PATENTED

PART NO. / DRAWING NO.
V890-1RX1-A1

FILE NAME
V890-1RX1-A1_E.DWG

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

REV. : E PAGE : 2

bel MAGNETIC SOLUTIONS
a bel group

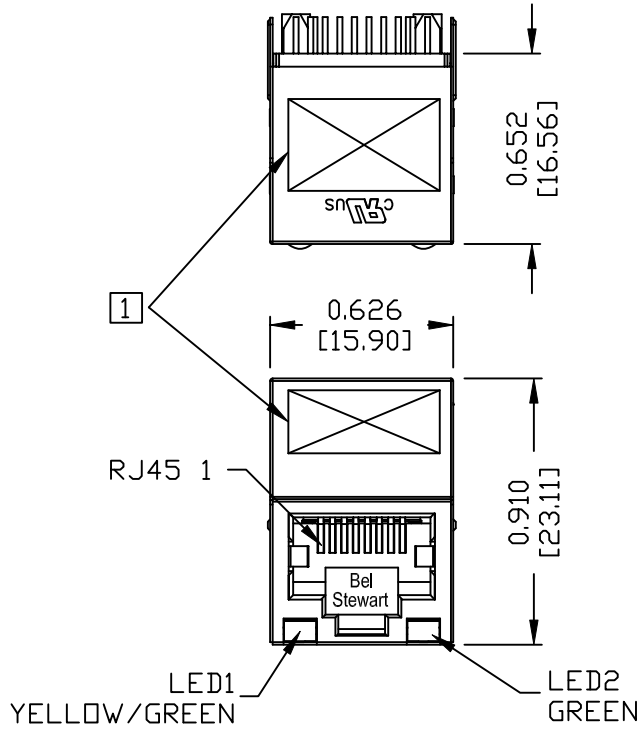
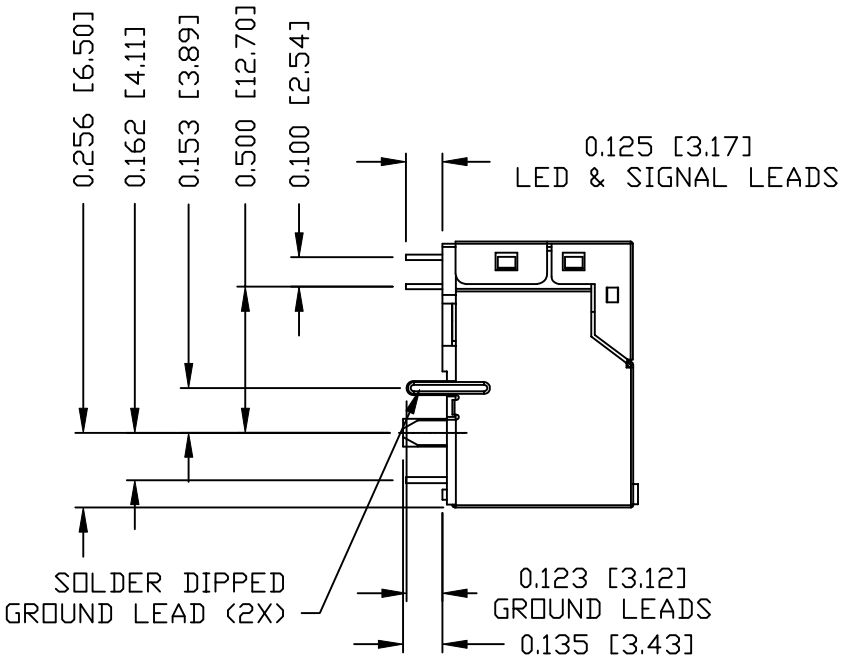
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MECHANICAL SPECIFICATION

RoHS



NOTES:

- 1. PLASTIC HOUSING: THERMOPLASTIC PBT, BLACK
FLAMMABILITY RATING UL 94V-0
- 2. CONTACTS: 30 MICRO-INCH HARD GOLD PLATING OR EQUIVALENT.
- 3. OUTPUT PINS: TIN-COATED COPPER WIRE, DIA 0.018 INCH.
100 MICRO-INCH MIN MATTE TIN.
PINS ARE SOLDER DIPPED.
- 4. METAL SHIELD: NICKEL PLATED ON COPPER ALLOY.
(ALL GROUND LEADS ARE SOLDER DIPPED)
- 5. JACK CAVITY CONFORMS TO FCC RULES AND REGULATIONS.
- 6. MARK PART WITH MFG LOGO, MFG NAME, PART NUMBER,
DATE CODE AND PATENTED.

- 2. THE PRODUCT IS RoHS COMPLIANT.
- 3. THE PRODUCT IS PATENT PRODUCT. THE PATENT NUMBER IS U.S. PAT. 6,840,817.
- 4. THE PART IS RECOMMENDED FOR WAVE SOLDERING. THE SUGGESTED PEAK WAVE SOLDERING CONDITION IS 260°C MAX AND 10 SECONDS MAX.

UL RECOGNIZED - FILE #E196366 AND E169987.

RIGINATED BY QNY YUAN ATE 2025-09-15	TITLE gigabit MagJack® (8 core, Vertical) PATENTED	PART NO. / DRAWING NO. V890-1RX1-A1	STANDARD DIM.		[] METRIC DIM.	
			TOL. IN INCH		AS REF.	
		FILE NAME V890-1RX1-A1_E.DWG	.X		UNIT : INCH [mm]	
			.XX		SCALE : N/A	
.XXX	±0.010			SIZE : A4		
RAWN BY ARRY YE ATE 2025-09-15			 bel MAGNETIC SOLUTIONS a bel group			

02(2)120214

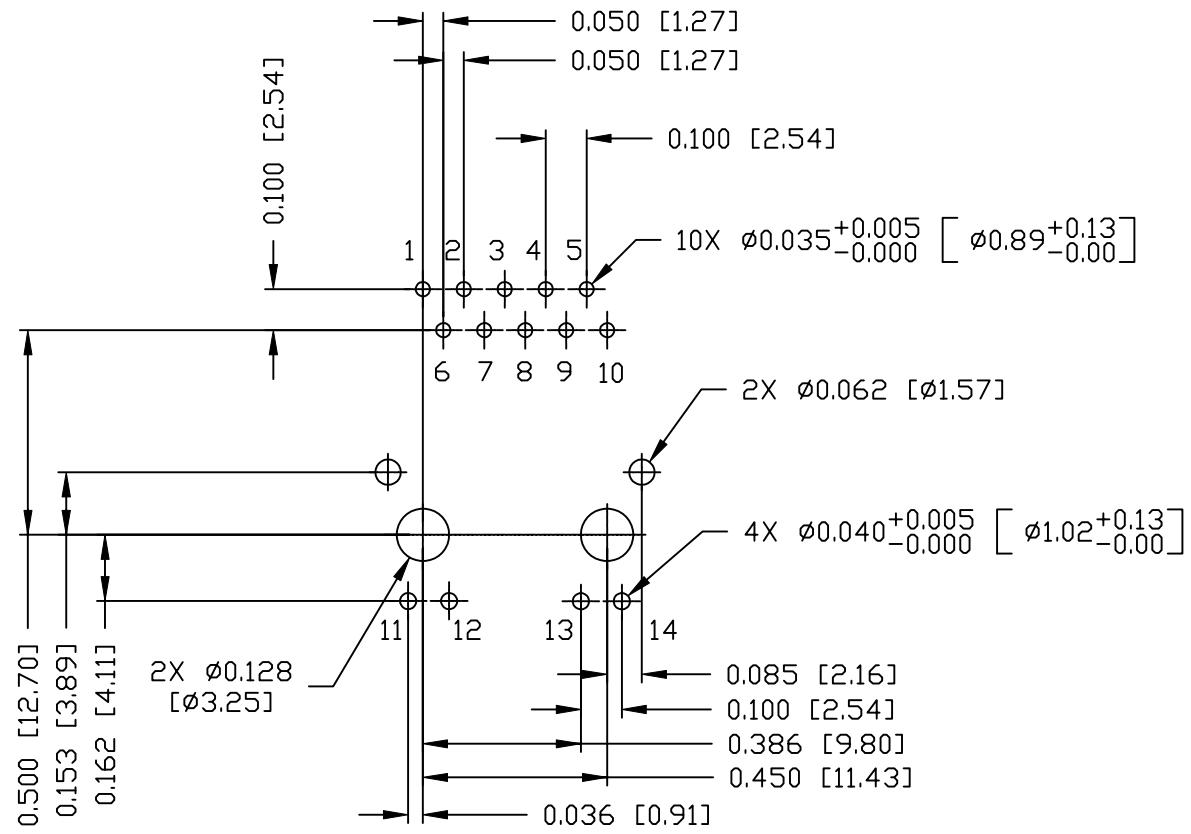
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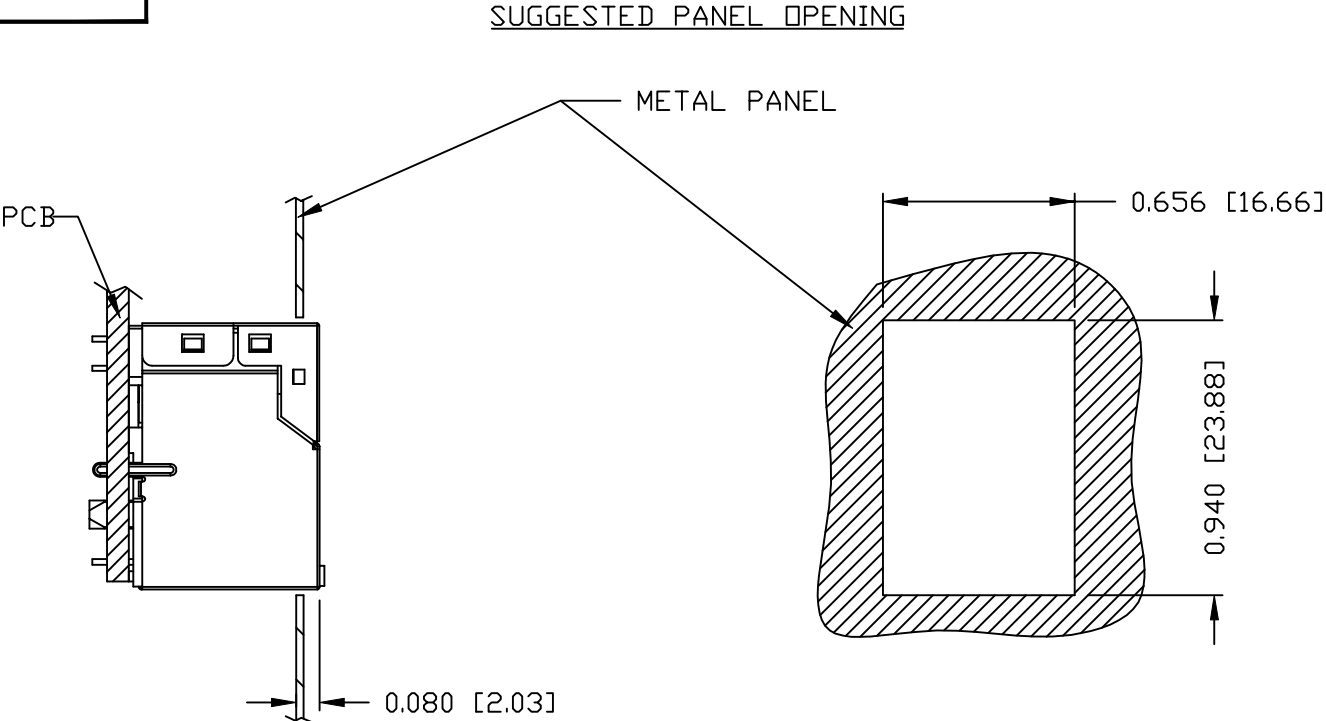
RECOMMENDED PCB FOOTPRINT
COMPONENT SIDE VIEW



RIGINATED BY DNY YUAN ATE 2025-09-15		TITLE gigabit MagJack® (8 core, Vertical) PATENTED	PART NO. / DRAWING NO. V890-1RX1-A1		STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.		 bel MAGNETIC SOLUTIONS a bel group
RAWN BY ARRY YE ATE 2025-09-15			FILE NAME V890-1RX1-A1_E.DWG		.X		UNIT : INCH [mm]		
					.XX		SCALE : N/A		
					.XXX ±0.004		⊕  SIZE : A4		

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NOTES:

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-I3(TOP)
0200-9999-I4(BOTTOM)
PACKING QUANTITY : 55 PCS FINISHED GOODS PER TRAY
9 TRAYS (495 PCS FINISHED GOODS) PER CARTON BOX

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

				REV. : E		PAGE : 5	
ORIGINATED BY DANY YUAN DATE 2025-09-15	TITLE gigabit MagJack® (8 core, Vertical) PATENTED	PART NO. / DRAWING NO. V890-1RX1-A1	STANDARD DIM. TOL. IN INCH		[] METRIC DIM. AS REF.		
			.X		UNIT : INCH [mm]		
		FILE NAME V890-1RX1-A1_E.DWG	.XX		SCALE : N/A		
			.XXX	±0.005		SIZE : A4	
02(2)120214		This document is electronically generated. This is a controlled copy if used internally					

