REV.	LOCAS.	DESCRIPTION	DATE	DRAWN
A	NEW	INITIAL RELEASE.	2025.07.26	谢青平

16.20

13.45

3.20±0.30

25.40

3.15

12.70

3.05

6.35

10.80   8.89

J8   J1
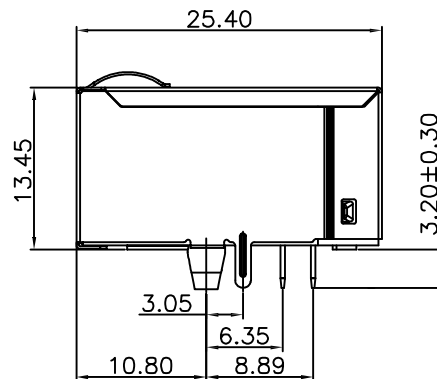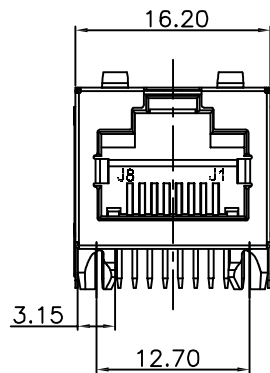
Coil Base:Henolic,PF2A5-151J,UL 94V-0,Black
Terminal/Copper Alloy T=0.40X0.40mm Thickness
Meets or exceeds IEEE 802.3 standard for 10/100 Base-TX
350uH minimum OCL with 8mA Bias current
Available with or without LEDs
Minimum 1500Vrms Isolation per IEEE802,3 requirement
Operating temperature 0℃ to +70℃
Storage temperature -40℃ to +85℃
Materials
Metal Shell :Copper Alloy
Housing:Thermoplastic,LCP,UL 94V-0,Black
Insert:Thermoplastic,LCP,UL 94V-0,Black
Contact Terminal/phosphor Bronze
All materials must meet GREENCONN
hazardous substances control standards.

11.43

2.54

1.27

P10   P2

10-Ø0.90   P9   P1

2-Ø1.60

2-Ø3.25

6.35

8.89

3.05

12.70

16.00

Recommended PCB Layout(Top View)
(Tolerance:±0.05)

1.27

2.54

11.43
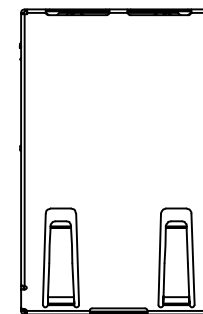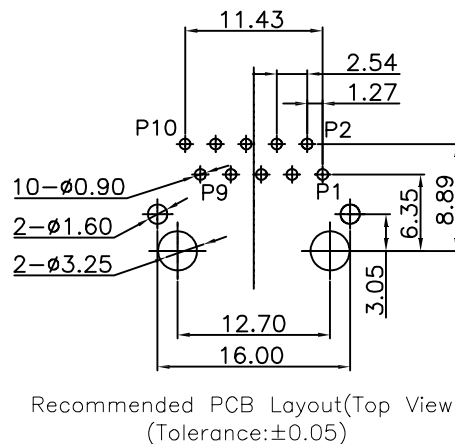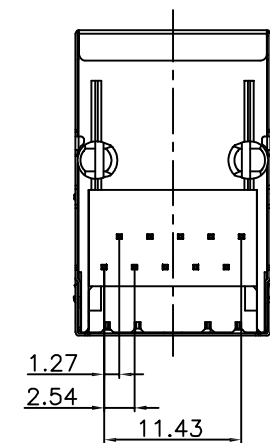
TOP   VIEW

Ordering Information

RJ02-EEB012-XXXX - XX C X A X

No.of pins
1X10

Selective Plating
53=Gold 6µ"/Tin

Color
1=Black

Selective Packing
B=Tray

3RD.ANG
PROJ.
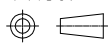
GENERAL TOLERANCE	
X.˚±5.0˚	X.±
.X˚±3.0˚	.X±0.30
.XX˚±2.0˚	.XX±0.25
.XXX˚±1.0˚	.XXX±0.10

DESIGNED: 谢青平	DATE: 2025.07.26
CHECKED: 林泽云	DATE: 2025.07.26
APPROVED: 林泽云	DATE: 2025.07.26

DWG. NO.
RJ02-EEB012-C1

PART NO.
RJ02-EEB012-XXXX-XXCXAX

TITLE.
RJ45 Connector With
Transformer 100Base
Tab-UP 1Port With POE

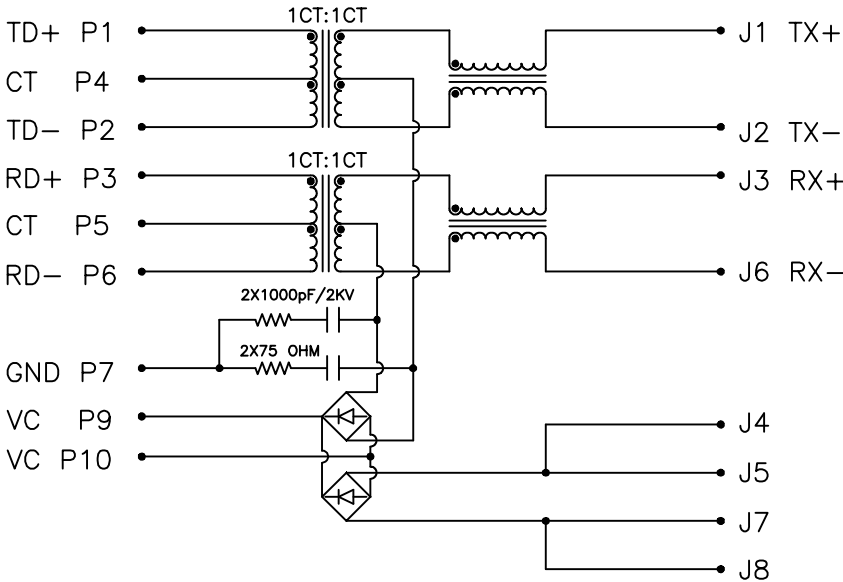| REV. A	UNIT. mm	SCALE. 1:1	PAGE. 1/2

5K

ELECTRICAL SPECIFICATIONS@25°C UNLESS OTHERWISE NOTED:

1.Turn Ratio(+/−2%):1CT:1CT

2.Inductance OCL:
  350uH Min @100KHz 0.1V DC Bias 8mA

3.Insertion Loss:
  −1.0dB Max @1−100MHz

4.Return Loss:
  −20dB Min @1−10MHz load 100Ω
  −18dB Min @10−40MHz load 100Ω
  −14dB Min @40−60MHz load 100Ω
  −12dB Min @60−80MHz load 100Ω

5.Cross talk;
  −40dB Min @1−30MHz
  −35dB Min @30−60MHZ
  −30dB Min @60−100MHZ

6.Common Mode Rejection:
  −30dB Min @1−100MHZ

7.HIPOT TEST:1500Vrms 1mA.Max

8.DC CURRENT/
  VOLTAGE RATING −PSE PINS: 350mA MAX
  @54V DC(CONTINUOUS)

SCHEMATIC

PCB SIDE TO PHY

CABLE SIDE

TD+ P1 — 1CT:1CT — J1 TX+
CT P4
TD− P2 — J2 TX−
RD+ P3 — 1CT:1CT — J3 RX+
CT P5
RD− P6 — J6 RX−
2X1000pF/2KV
2X75 OHM
GND P7
VC P9 — J4
VC P10 — J5
J7
J8

3RD.ANG PROJ.	GENERAL TOLERANCE		DESIGNED: 谢青平	DATE: 2025.07.26	DWG. NO. RJ02−EEB012−C1	TITLE.
	X.°±5.0°	X.±				RJ45 Connector With Transformer 100Base Tab−UP 1Port With POE
	.X°±3.0°	.X±0.30	CHECKED: 林泽云	DATE: 2025.07.26		
	.XX°±2.0°	.XX±0.25			PART NO. RJ02−EEB012−XXXX−XXCXAX	
	.XXX°±1.0°	.XXX±0.10	APPROVED: 林泽云	DATE: 2025.07.26		

REV. A	UNIT. mm	SCALE. 1:1	PAGE. 2/2

5K