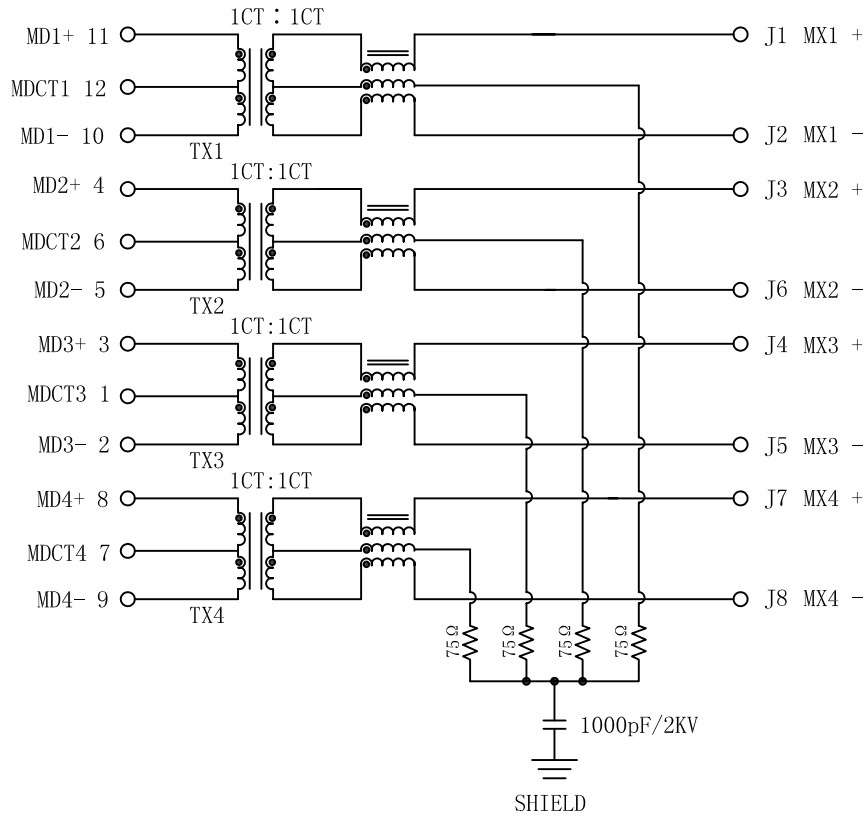


# Schematic:

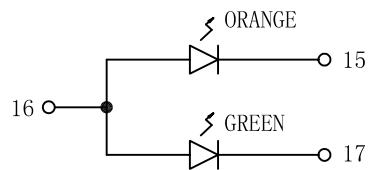
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A	REL	Modular Connectors/ Ethernet	2012/03/15	

PCB CONNECTIONS



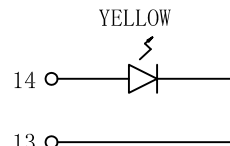
RJ45 CONNECTOR

- Electrical Specification @25°C
- Turns Ratio ( $\pm 2\%$ ) : 1CT : 1CT
  - OCL: 350uH Min @100KHz/100mVrms  
8mA DC Bias (0°C-70°C)
  - Insertion Loss(dB Max):  
0.5~100MHz:-0.8  
100~125MHz:-1.2
  - Return Loss(dB Min @100 OHMS  $\pm 15\%$ ):  
0.5~40MHz:-18  
50~100MHz:-[12-20LOG(f/80MHz)]
  - Crosstalk(dB Min):  
0.5~40MHz:-35  
40~100MHz:-[33-20LOG(f/50MHz)]
  - Common Mode Rejection Ratio:  
0.5~100MHz:-30dB Min
  - Hipot: 1500Vrms
  - Operating Temperature: 0°C ~+70°C.



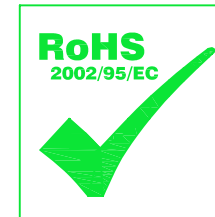
LEFT LED

LED POLARITY			COLOR
PIN 15	PIN 16	PIN 17	
-	+	/	ORANGE
/	+	-	GREEN



RIGHT LED

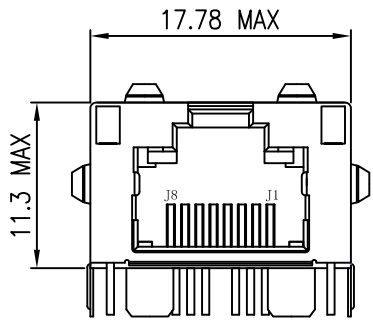
LED POLARITY			COLOR
PIN 13	PIN 14		
-	+		YELLOW



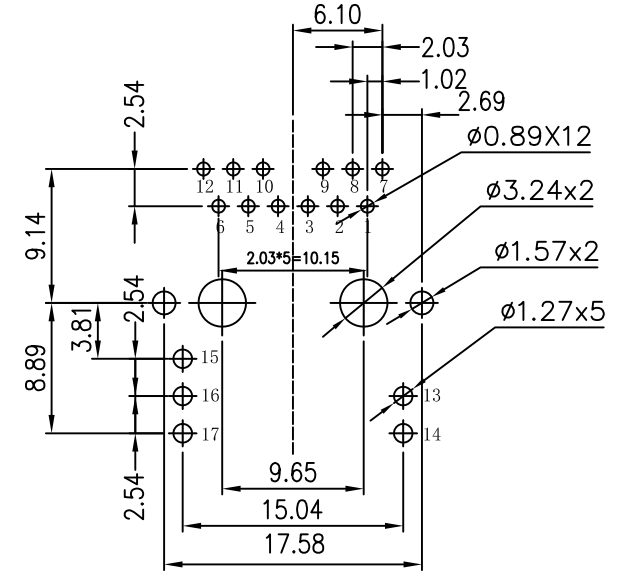
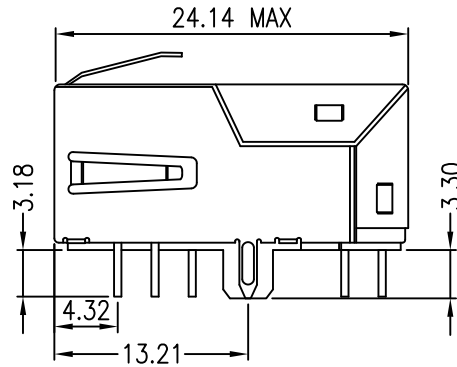
X:X	$\pm 0.20$	APPD:	Pulse J0G-0001NL alternative	
X:XX	$\pm 0.10$	CHKD:		
X:XXX	$\pm 0.05$	DR:		
ANGLES	$\pm 1^\circ$	UNIT: mm	PART NO. :	BCEK2413A98NL
	SCALE: 2/1	SHEET: 1/2	REV: A	DWG:

# Mechanical:

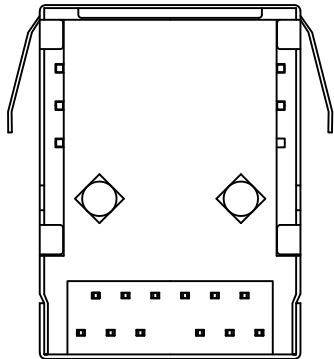
REV.	ECN NO.	DESCRIPTION	DATE	APPD
A	REL	Modular Connectors/ Ethernet	2012/03/15	



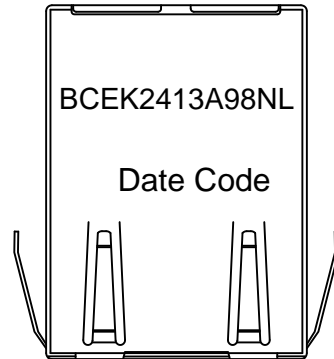
Front Side View



Suggested PCB Layout (Top View)



Bottom Side View



Top Side View

### NOTES:

1. Designed to support application, such as SOHO (ADSL modems), LAN-on-Motherboard (LOM), hub and Switches.
2. Meets IEEE 802.3 specification
3. Connector Materials:  
 Housing: Thermoplastic UL94V-0  
 Contact/Shield: Copper alloy  
 Shield plating: Nickel  
 Contact plating: Gold 6 micro-inches min. In contact area.
4. Wave peak temperature: 260°C, 5Sec.



X:X	±0.20	APPD:	Pulse J0G-0001NL alternative	
X:XX	±0.10	CHKD:		
X:XXX	±0.05	DR:	TITLE: RJ45 Connector With 1000 Base-TX Integrated Magnetic	
ANGLES	±1°	UNIT: mm	PART NO.:	BCEK2413A98NL
	SCALE: 2/1	SHEET: 2/2	REV: A	DWG: