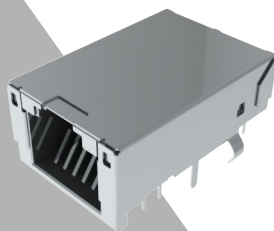


## PRODUCT OVERVIEW

YAGEO Group's **JXD1-102xNL-series** of low Profile, mid-Mount, Trough Hole Reflow (THR) compatible ICMs, provide Ethernet connectivity for industrial Ethernet rate from 100Mb to 1Gbit.

The **JXD1-1025NL** supports 30W 4 pair PoE with Internal powerline choke; making It ideal for proprietary system requiring remote DC power feed installed up to 100M away.

This **JXD1-** Low Profile family are UL listed, RoHS, REACH compliant and support IR Reflow Soldering at 245°Cpk, removing the need for a secondary solder process during PCB assembly.



### Quick Facts NEW

Mid-Mount, low profile design for Industrial Ethernet where overall equipment height is an issue.

Support IEEE802.3at, 30W PoE+ over 4 pair for 100Mb data rates providing remote DC power to Terminal sensing equipment

Design compatible with 245°C IR Reflow supporting Pin-in-Paste (PiP) or Through hole reflow (THR)

### Contact & Information

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## Wired Comms

### PulseJack™ ICM

## Low Profile, THR 10/100/1000Base-T ICM



### Key Selling Points

#### Features

**IEEE 802.3 Gigabit Compliant**

**Supports remote DC Power feed over cable**

**Low Profile, Mid-Mount Form Factor (LWH)**

**Wide Operating Temperature**

**Reliable Performance**

**Pin-in-Paste / THR Technology Compatible**

#### Customer Value

Internal circuitry supports both Voltage and current driven PHYs

Supports IEEE802.3at, Enables 4pair 30W (600mA) DC power

<10mm height above PCB (26.06 x 17.58 x 11.30/9.39mm)

Industrial Grade -40 to +85°C working range with PoE (30W)

UL certified, Modular construction with Auto wound coils

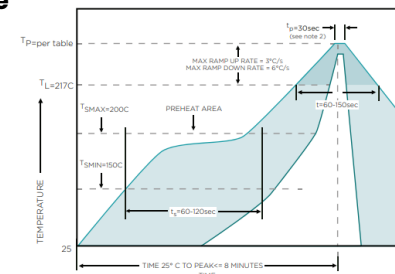
Designed for Wave and reflowing soldering – ensuring easy integration into high-volume manufacturing

### Target Applications

- Industrial Switches
- Routers – Copper and Wi-fi
- Network Cards
- Process Control
- Low Profile Embedded Computing
- Security entry systems
- PZT Digital Cameras
- Remote powered Sensing

### Market Advantages

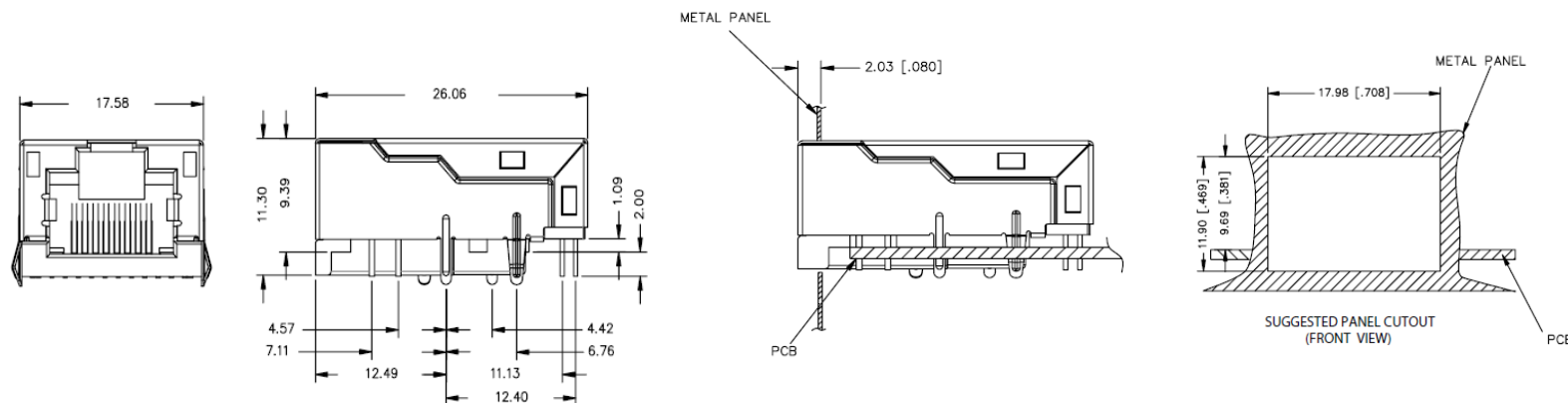
- Compact footprint with range of Data rates
- 30W PoE over 4 pair Cabling in small PCB area
- UL Certified modular design for high Reliability
- RoHS, REACH and lead Free
- IR reflow compatible
  - JEDEC-J-STD-020F
  - 245°C peak
  - MSL 1



## PRODUCT OVERVIEW

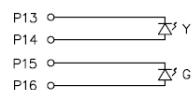


## Low Profile, THR 10/100/1000Base-T ICM

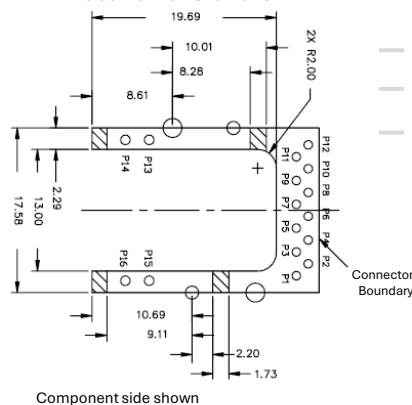


Part Number	Speed	4Pair PoE	Insertion loss (MAX)	Return Loss	Common Mode Rejection	Schematic	LED option (Left/Right)
JXD1-1020NL	10/100Base-TX	Non	-1.2dB @ 100MHz	-10dB @ 60-80MHz	-30dB @ 1-100MHz	Circuit A	Yellow - Green
JXD1-1025NL	10/100Base-TX	30W 4pair	-1.2dB @ 100MHz	-10dB @ 60-80MHz	-30dB @ 1-100MHz	Circuit B	Yellow - Green
JXD1-1022NL	1000Base-T	None	-1.2dB @ 125MHz	-10dB @ 100MHz	-30dB @ 1-100MHz	Circuit C	Yellow - Green

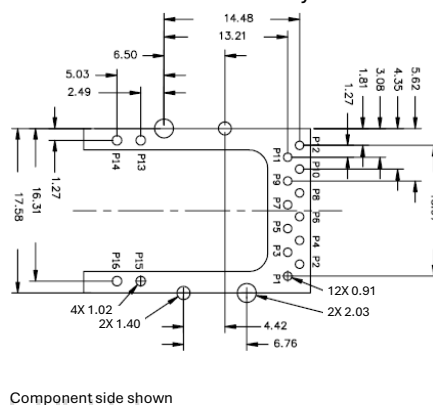
## LED Pin out



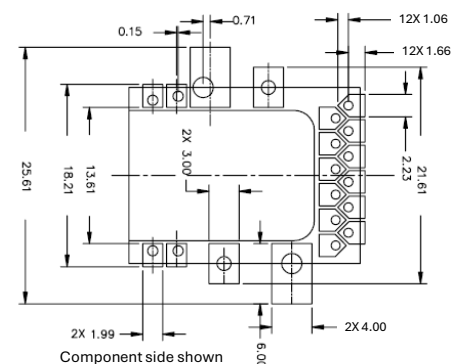
## Location of Stand-off



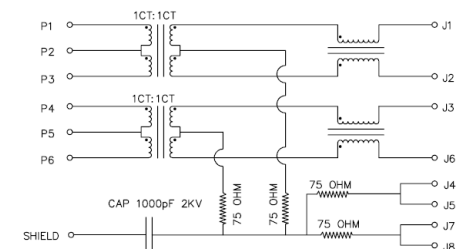
## Recommended PCB Layout



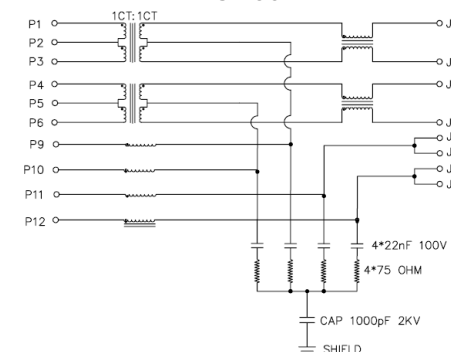
## Suggested PCB THR Solder Pad Layout



## Circuit A



## Circuit B



## Circuit B

