

RJ45/Dual USB Combo

Description:

RJ45/Dual USB Combo is a Through Hole (THT) Integrated Connector Module with a single RJ45 in combination with 2USB ports. The internal magnetics are designed to support 10/100/1000Base-TX applications such as LAN-on-Motherboard (LOM) and PC applications.



Features and Benefits:

- RoHS peak wave solder temperature rating 260°C
- USB module complies with USB 2.0 standards
- RJ45 connection meets CAT3, 5e & 6 Fast Ethernet performance standard

Electrical Performance Summary:

- Meets IEEE 802.3 specification
- High performance for maximum EMI suppression
- Minimum 1500Vrms isolation per IEEE 802.3 requirement

Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

RoHS Compliant Part Number	Data Rate	Turns Ratios		LEDs	Insertion Loss TX/RX (dB MAX)	Return Loss @ 100Ω ±15Ω (dB TYP)				Cross talk (dB MIN)			Common Mode Rejection (dB TYP)		Hipot (Vrms) (MIN)
		TX	RX			1-65 MHz	1-10 MHz	30 MHz	60-80 MHz	1-10 MHz	32-60 MHz	60-100 MHz	1-50 MHz	50-130 MHz	
JW0-0009NL	10/100	1CT:1	1CT:1	G/Y ²	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	-20	1500
JY0-0016NL	10/100	1CT:1	1CT:1	G-O/Y	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	-20	1500
JW0-0006NL	10/100/1000	1CT:1	1CT:1	G/G-Y	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	-20	1500
JW0-0013NL	10/100/1000	1CT:1	1CT:1	G-O/Y	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	-20	1500

NOTES:

- LEDs Left/Right: G = green; Y = yellow; O = Orange.
- G = Green with 250Ω internal resistor; Y = Yellow with 250Ω internal resistor.

RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JW/JY Series	5lbs./2.268kgs.	5lbs./2.268kgs.	500 Insertions	20lbs./9.072kgs.

RJ45 Material Specification

Part Number	Shield		Contact		Solder Area	Housing		MSL ² Rating
	Material	Finish	Material	Plating Area		Material	Specification	
JW/JY Series	Brass	20-40μ inches thick nickel over brass	Phosphor Bronze	15μ inches gold over 30-80μ inches nickel	Tin matte finish	Thermoplastic	UL 94 V-0	1

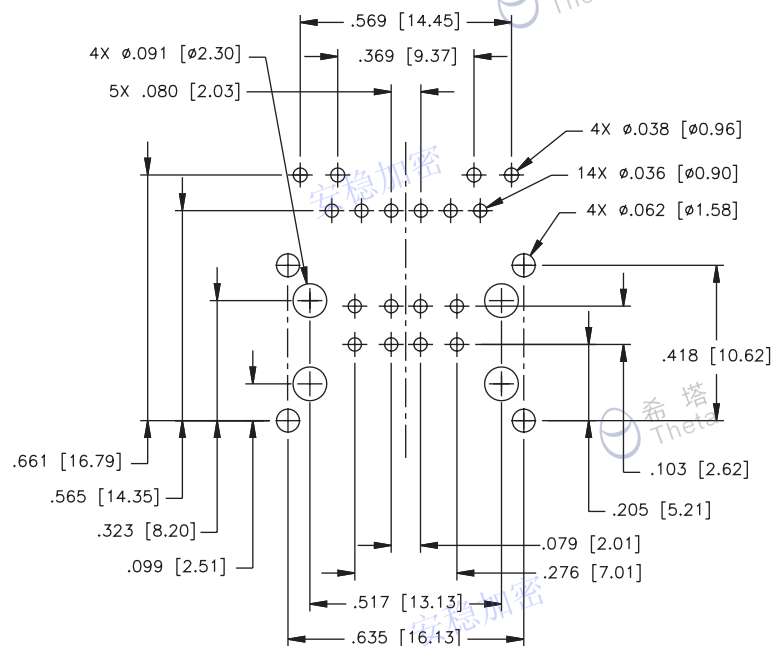
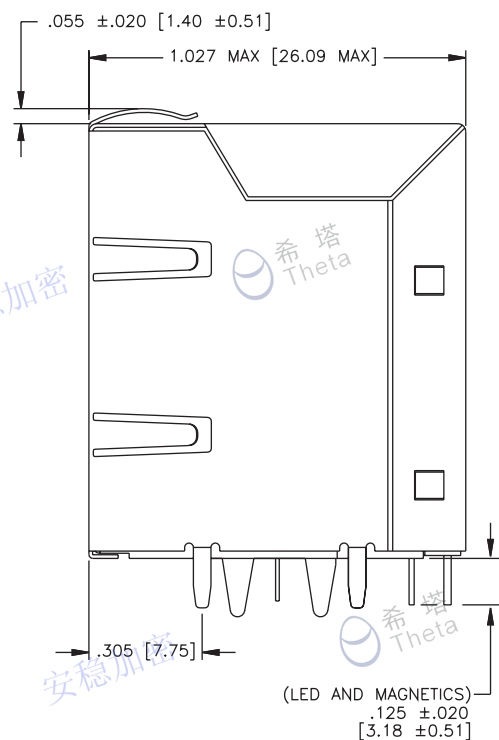
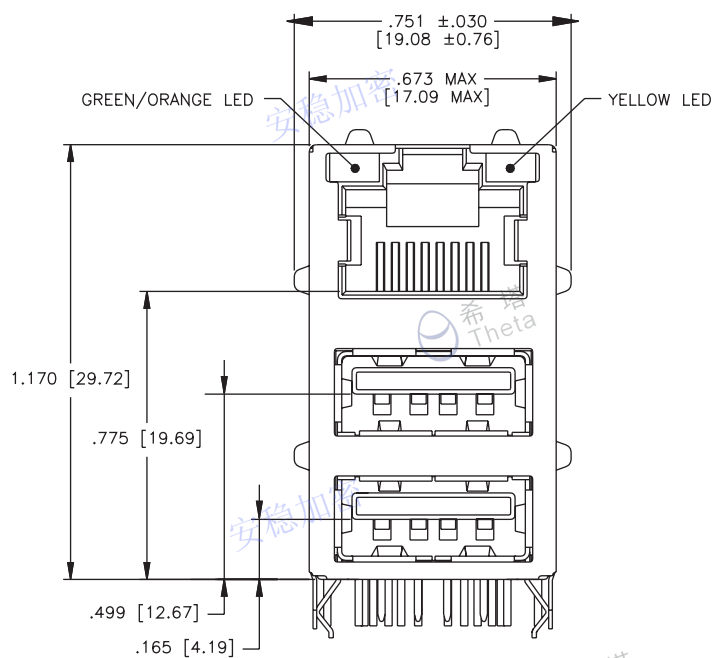
NOTES: 1. Connector dimensions comply with FCC dimension requirements. 2. MSL = Moisture Sensitivity Level

RJ45/Dual USB Combo

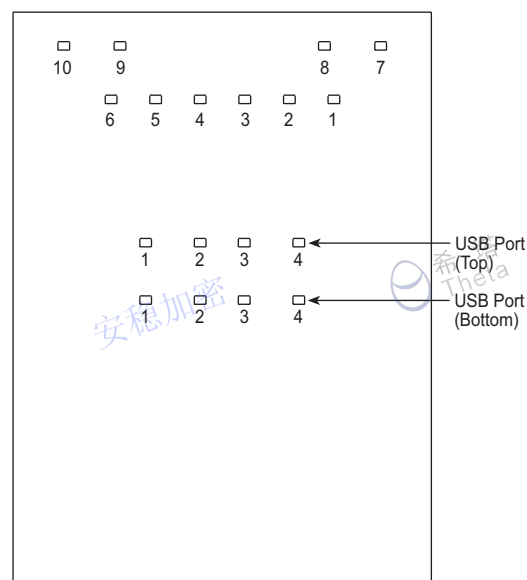


Mechanical

JY0-0016NL



SUGGESTED FOOTPRINT (SHOWN FROM COMPONENT SIDE)
 DIMENSIONAL TOLERANCE: INCHES [METRIC]
 .XXX $\pm$.003 [X.XX $\pm$ 0.08]



PIN CONFIGURATION (SHOWN FROM COMPONENT SIDE)

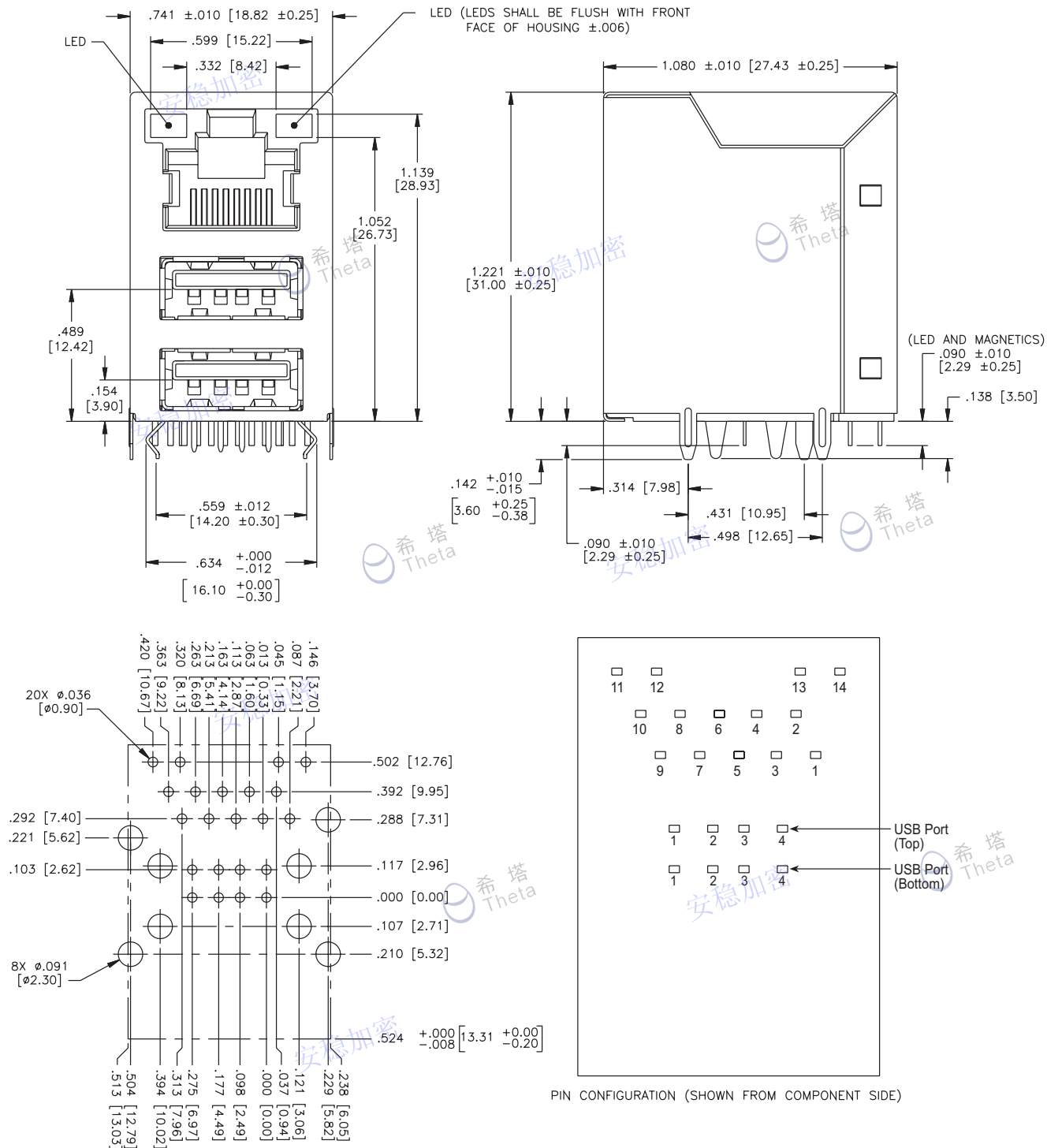
Weight 8.1 grams
 Tray 25/tray

RJ45/Dual USB Combo



Mechanical

JW0-0006NL, JW0-0009NL



SUGGESTED FOOTPRINT (SHOWN FROM COMPONENT SIDE)

DIMENSIONAL TOLERANCE: INCHES [METRIC]
 $.XXX \pm 0.003$ [$X.XX \pm 0.08$]

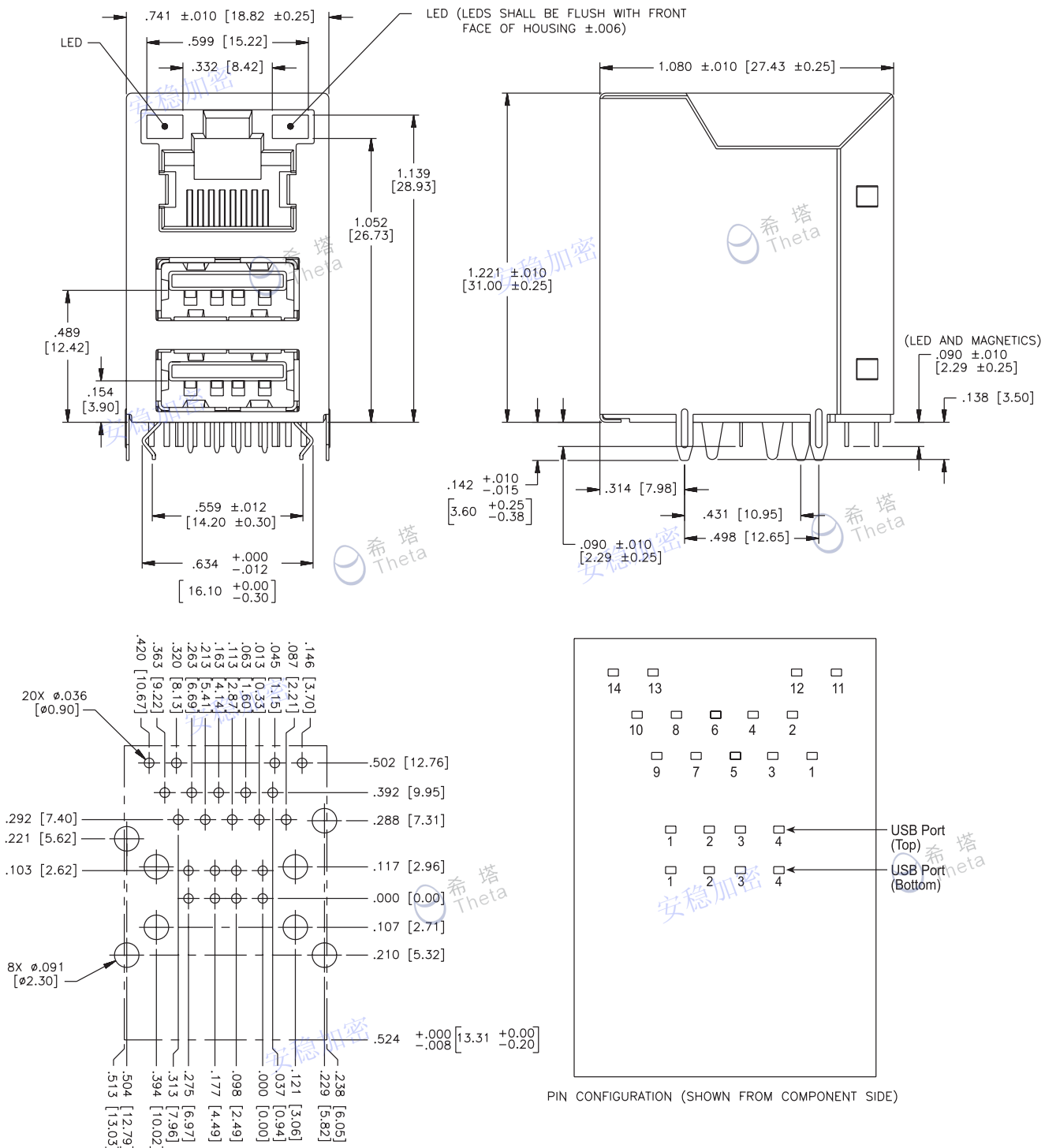
Weight 8.1 grams
 Tray 25/tray

RJ45/Dual USB Combo



Mechanical

JW0-0013NL



SUGGESTED FOOTPRINT (SHOWN FROM COMPONENT SIDE)

DIMENSIONAL TOLERANCE: INCHES [METRIC]
 .XXX ± 0.003 [X.XX ± 0.08]

Weight 8.1 grams
 Tray 25/tray

RJ45/Dual USB Combo

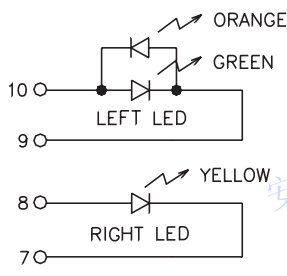
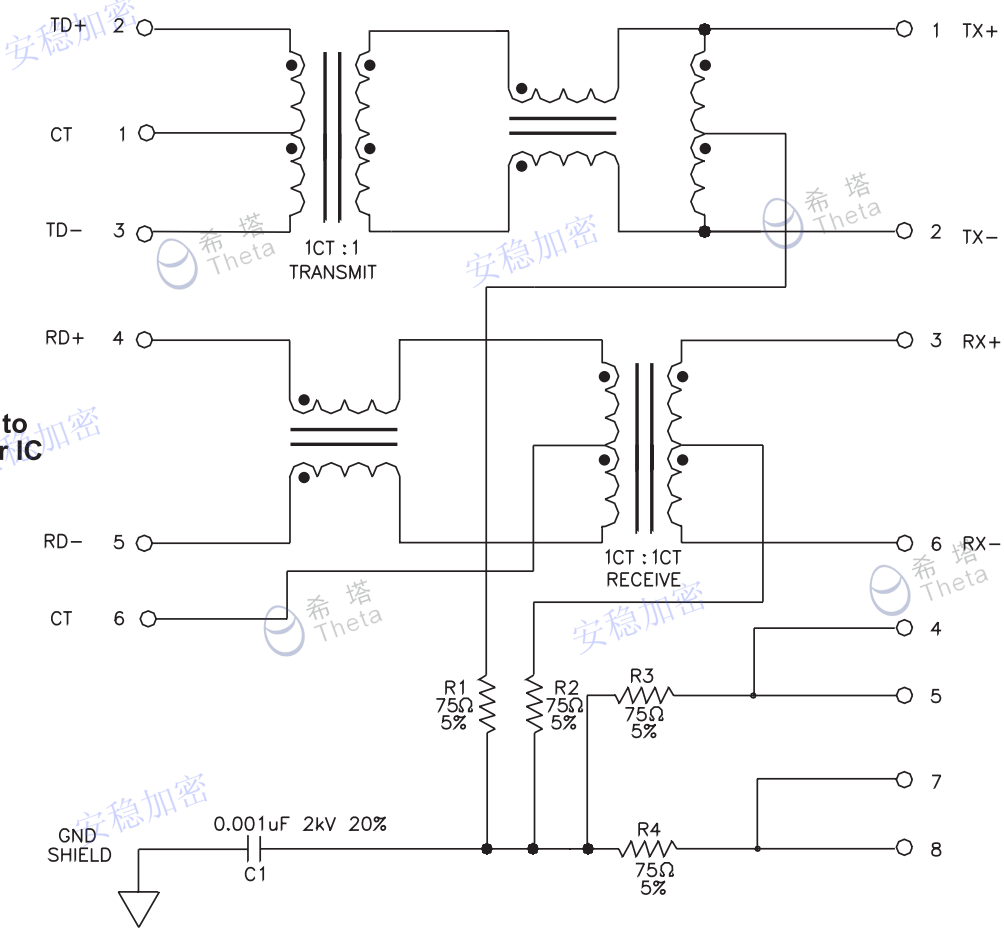


Schematic

JY0-0016NL

PCB connections to the Physical Layer IC

CABLE



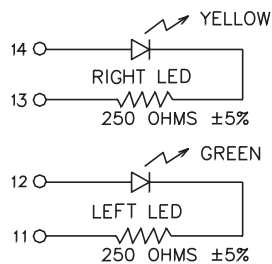
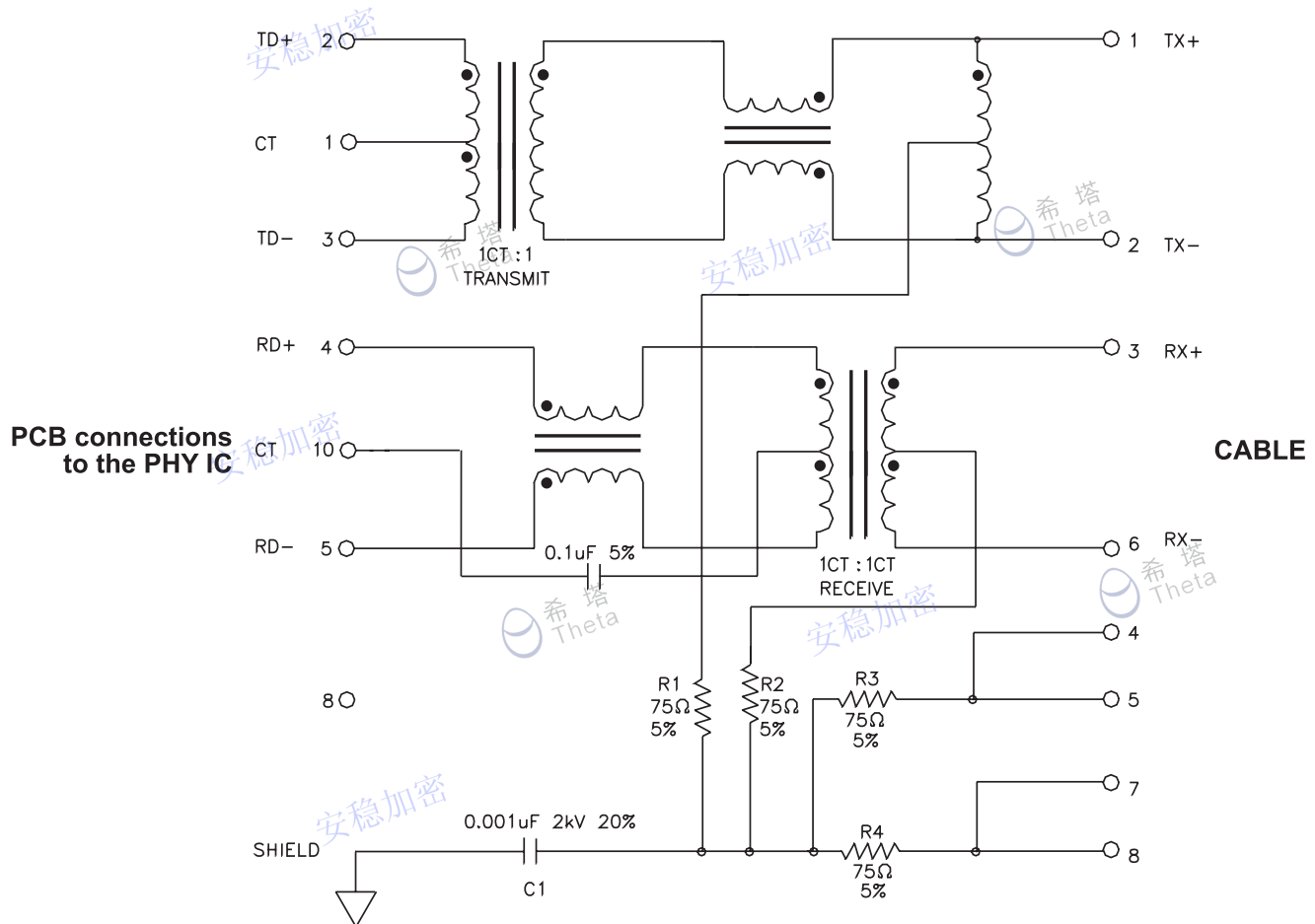
STANDARD LED	WAVE * LENGTH	V(MAX)	I_F @5V	
			(TYP)	(MAX)
YELLOW	585 nm	5 V	10 mA	15 mA
GREEN/ORANGE	568/610 nm	5 V	10 mA	15 mA

RJ45/Dual USB Combo



Schematic

JW0-0009NL



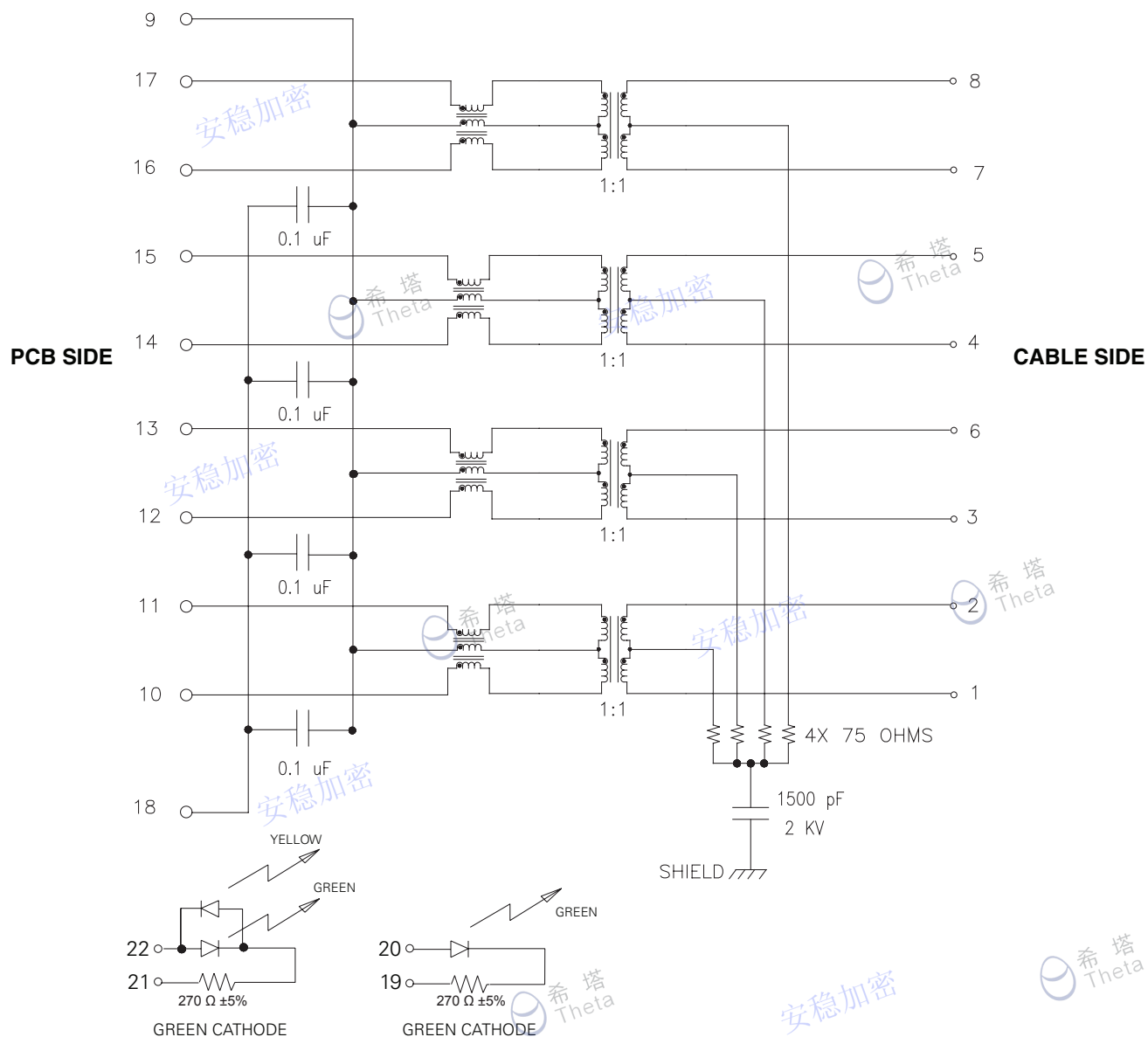
STANDARD LED	WAVE LENGTH	V(MAX)	I _F @5V (TYP) (MAX)	
YELLOW	585 nm	5 V	10 mA	15 mA
GREEN	565 nm	5 V	10 mA	15 mA

RJ45/Dual USB Combo



Schematic

JW0-0006NL



JW0-0006 NL LEDs

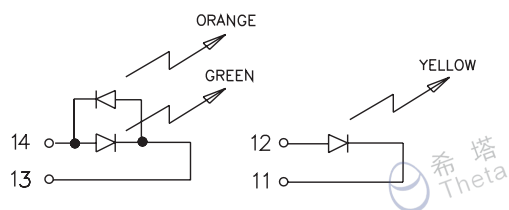
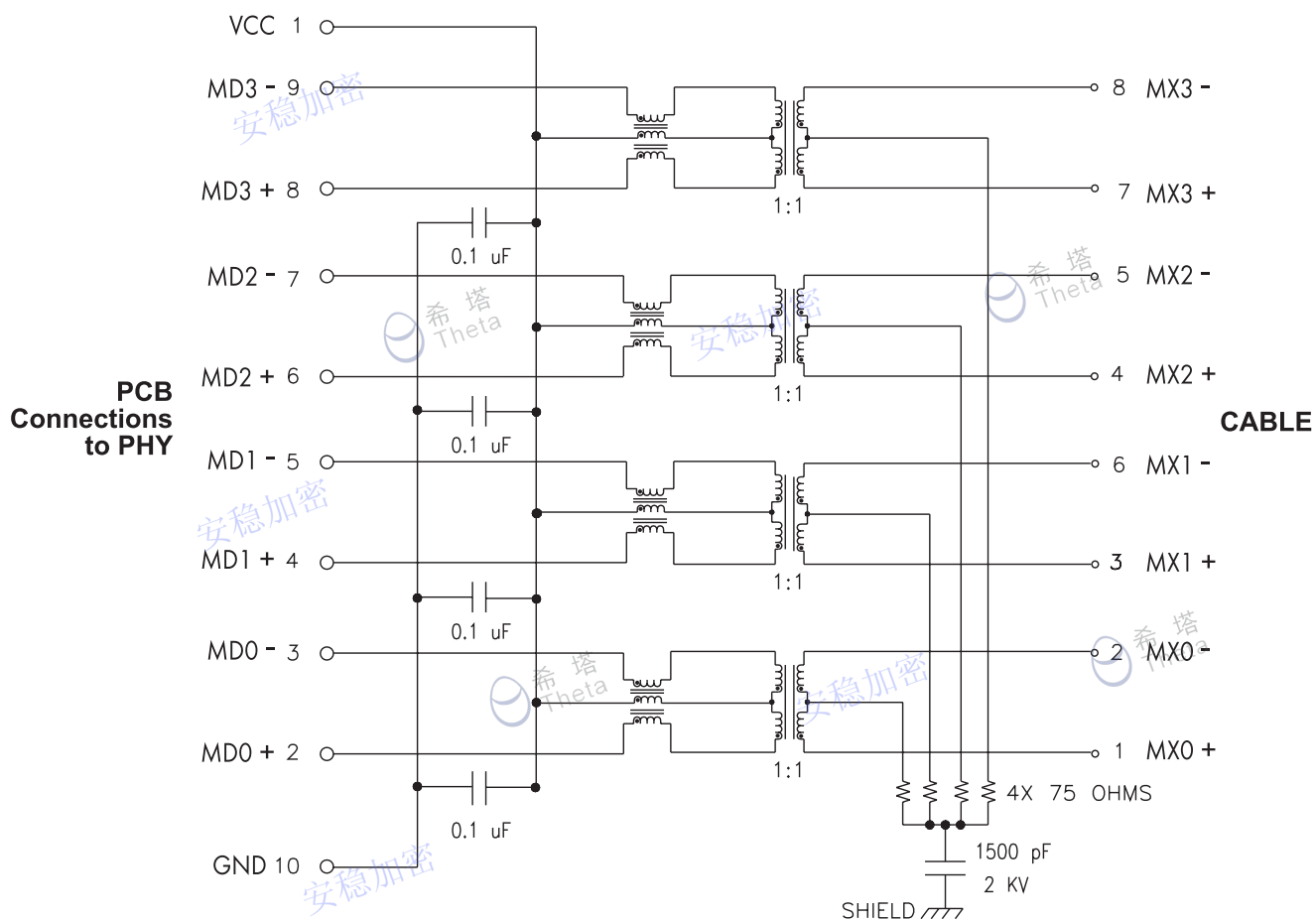
STANDARD LED	WAVE * LENGTH	V(MAX)	I_F @5V (TYP) (MAX)	
GREEN/YELLOW	568/590 nm	5 V	10 mA	15 mA
GREEN	565 nm	5 V	10 mA	15 mA
YELLOW	585 nm	5 V	10 mA	15 mA
GREEN/ORANGE	568/610 nm	5 V	10 mA	15 mA

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Schematic

JW0-0013NL



JW0-0013NL LEDs

STANDARD LED	WAVE * LENGTH	V(MAX)	I_F @5V (TYP) (MAX)	
GREEN/YELLOW	568/590 nm	5 V	10 mA	15 mA
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GREEN/ORANGE	568/610 nm	5 V	10 mA	15 mA

希塔
Theta

JW0 and JY0 series meet the stringent open circuit inductance requirements of IEEE. When an 8mA DC current is applied across the transformer windings, the transformer will provide at least 350 μ H. The transformers used in each module also provide 1500Vrms minimum isolation, wide bandwidth with minimal attenuation and fast rise times to minimize system level jitter.

