

RJ45 1000 Base-T, Single Port w/ LEDs, Extended Temperature



ARJ-205

Request Samples



Check Inventory



16.26 x 13.84 x 21.59 mm
RoHS/RoHS II Compliant
MSL Level = N/A

Features

- Compliant with IEEE802.3 standard
- Designed for Network Interface Cards (NIC), LAN-on-Motherboard (LOM) and PC applications Ethernet Switch, Servers, & Access Point Routers
- High performance for maximum EMI suppression
- 350 μ H minimum OCL with 8mA bias current
- RoHS peak wave solder temperature 260°C

Applications

- Support 1000 Base-T applications w LEDs
- Extended Temperature (-40°C~85°C)
- Applicable for Ethernet Switch, Servers, & Access Point Routers
- Provides signal conditioning, EMI suppression and signal isolation
- Shorter body design for tight spacing area

Electrical Specifications

Parameters	Minimum	Typical	Maximum	Units	Notes
Operating Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	
Turn Ratio ($\pm 5\%$)	1CT:1CT				Tx
	1CT:1CT				Rx
Inductance (OCL)	350			μ H	100KHz/0.1V@8mA
Insertion Loss			-1.2	dB	0.3-100MHz
Return Loss	-16			dB	1-30MHz
	-13.5				40MHz
	-11.5				50MHz
	-10				60-80MHz
Cross Talk	-40			dB	30MHz
	-36				60MHz
	-30				100MHz
DCMR	-35			dB	30MHz
	-32				60MHz
	-30				100MHz
Hi-Pot	1500Vrms/0.5mA/60Sec or 1650Vrms/0.5mA/2Sec				Pri to Sec

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Materials

1. **Housing Material:**
MATERIAL: NYLON GF (Fr50) UL94V-0, STANDARD COLOR: BLACK
2. **Insert Material:**
MATERIAL: Phos-Bronze C5210 EH --- 0.35mm Thickness
Insert -PBT GF UL94V-0
 - a) PLATING (1): NICKEL
 - b) PLATING (2): 100%Sn
 - c) PLATING (3): GOLD (6u")
3. **Plat Material:**
PBT GF UL94V-0
4. **Contact pin Material:**
MATERIAL: Phos-Bronze C5191 --- 0.35mm Thickness
 - a. PLATING (1): NICKEL
 - b. PLATING (2): 100%Sn
5. **Shielding Material:**
BRASS C2680 PLATING: NICKEL
6. **Operating life:**
750 Cycles min

Note: Abracon Corporation will not alter any material composition without prior written notification.

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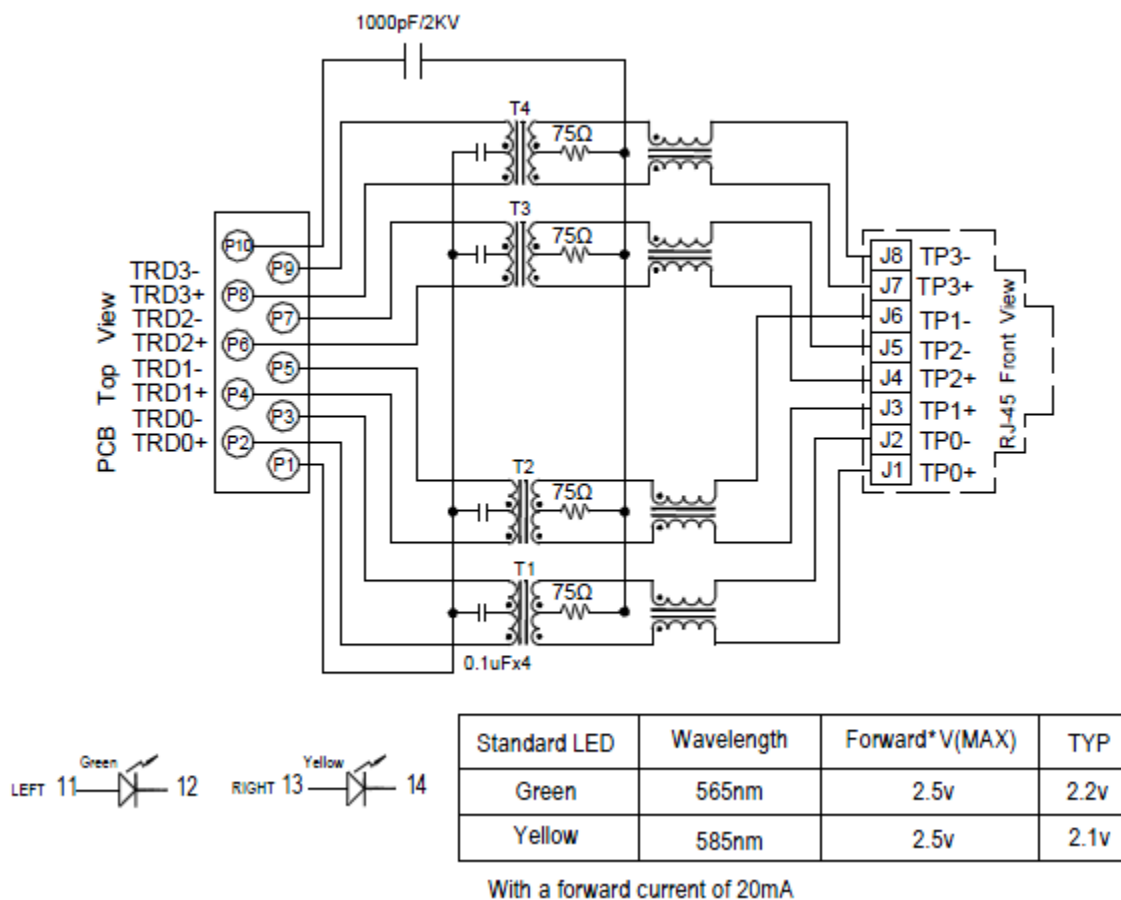


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Schematic



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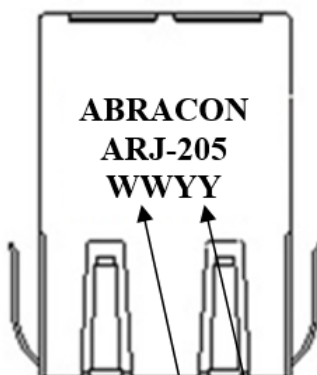


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Marking



YY: Year: E.g. 15 for 2015

WW: Week: E.g. 15 for the 15th week of the year.

Marking Method = Ink Marking

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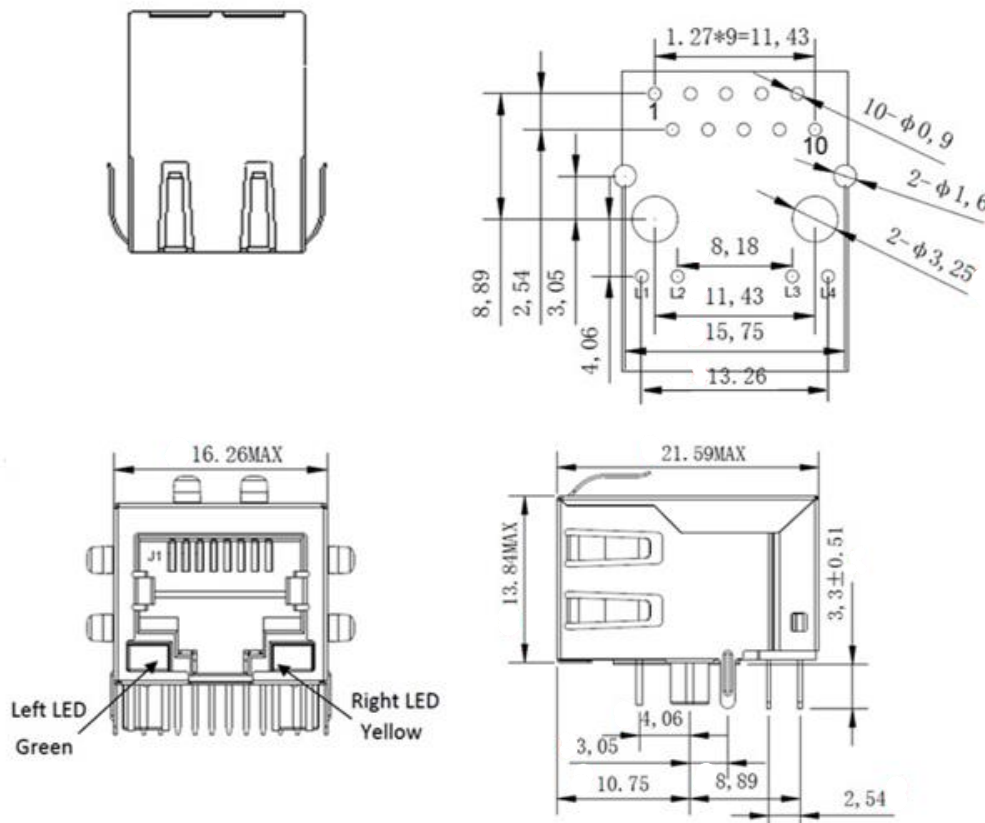


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Mechanical Specifications



UNIT: mm Unless otherwise specified, all tolerances are ± 0.25

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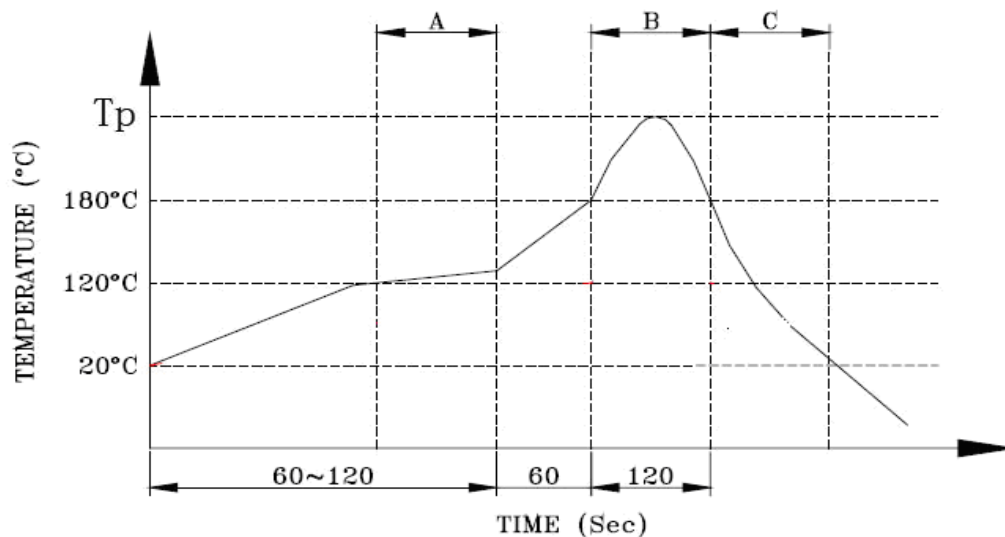


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Reflow Profile



— PIN TEMPERATURE

A. Preheating B. Soldering C. Gradual Cooling

Zone	Description	Temperature	Times
1	Preheat	150°C ~ 180°C	60 ~ 120 sec.
2	Peak heat	Tp 250°C±10°C	5 sec. MAX

Ref.

Solder paste: Sn/3.0Ag/0.5Cu

Ramp up rate: 3°C/s Max.

Ramp down rate: 6°C/s Max.

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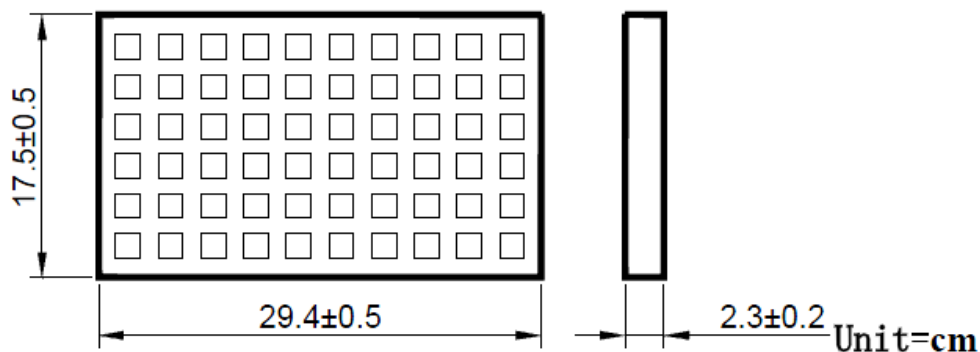


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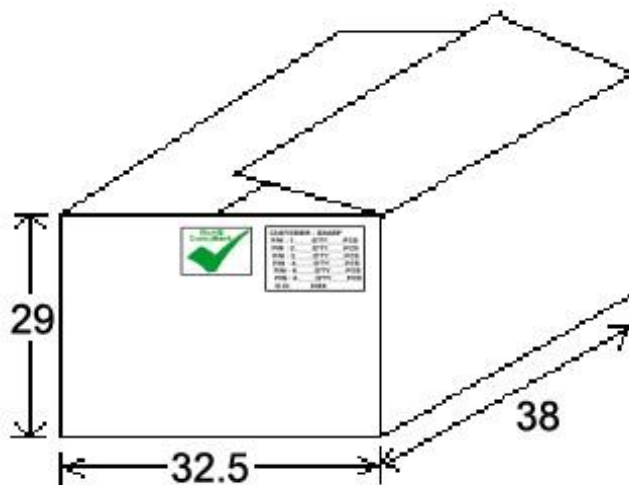
Packaging

1.0 **Packing:** 60pcs/tray
 Weight: 6.7 grams / pcs

Packaging Material: PET



Outer carton unit (optional): 1320 pcs/ 22 Trays/box



Dimensions: cm

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf (COTS, which are designed, intended and validated for use in commercial, industrial and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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REVISION A : 1/9/2025

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Mouser Electronics

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