

# RJ45 Single Port 10GBase-T Magnetic Module



ARJM11E-B5754NNEWCB

21.2 x 15.9 x 13.5 mm  
RoHS/RoHS II Compliant  
MSL = 1

## Features

- Single Port RJ45 with Magnetics
- Supports speed up to 10 Gbps
- Operating temperature range up to 0°C to +70°C
- Different Gold plating options
- Compatible with major IC's for Ethernet applications
- High performance magnetics for EMI suppression and common mode noise rejection
- 1CT:1CT TX and RX Transformers

## Applications

- Fast and gigabit Ethernet
- Hubs, Servers, Switches, Routers, Access points
- IP cameras, surveillance, and phone
- Industrial computers and robotics
- Networking and communications
- Broadcast video
- Set top box
- Test and Measurement

## Electrical Specifications

Parameters	Minimum	Typical	Maximum	Units	Notes
Inductance	120			μH	100 kHz, 0.1V with 8 mA DC Bias
Leakage Inductance			0.4	μH	100 kHz, 0.1V
DC Resistance			1.2	Ω	
Hi-pot	2250			VDC	60 s
Insertion Loss			3.0	dB	0.1 MHz
			2.0		1-400 MHz
Return Loss	20			dB	1-100 MHz
	10				100-300 MHz
	7.5				300-500 MHz
Crosstalk	25			dB	1-100 MHz
	15				100-500 MHz
CMR	25			dB	1-100 MHz
	20				100-500 MHz
DCR	30			dB	1-100MHz
	20				100-500 MHz
Turn Ratio	1CT:1CT				± 2%

\*f represents the test frequency specified in MHz



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REVISED: 10.04.2019

ABRACON IS  
ISO9001-2015  
CERTIFIED

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## Material Specifications

Parameter	Specification	
Housing	Material (Housing)	Glass Filled PA46, Black
	Flammability Rating	UL94V-0 (RoHS)
Contact	Material	Phosphor Bronze, 50-100 u" (min)
	Plating (1)	Nickel
	Plating (2)	50 u" Gold*
Shield	Material	Brass, 0.2mm
Jack Cavity	In conformance with the FCC Rules and Regulations Part 68 Subpart F	

\*For alternative Gold plating thickness, please contact ABRACON.

## Environmental Specifications

Parameters	Specification
RoHS	RoHS Compliant
MSL	1
Operating Temperature	0 °C to +70 °C
Storage Temperature	-40 °C to +85 °C

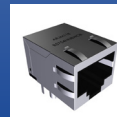


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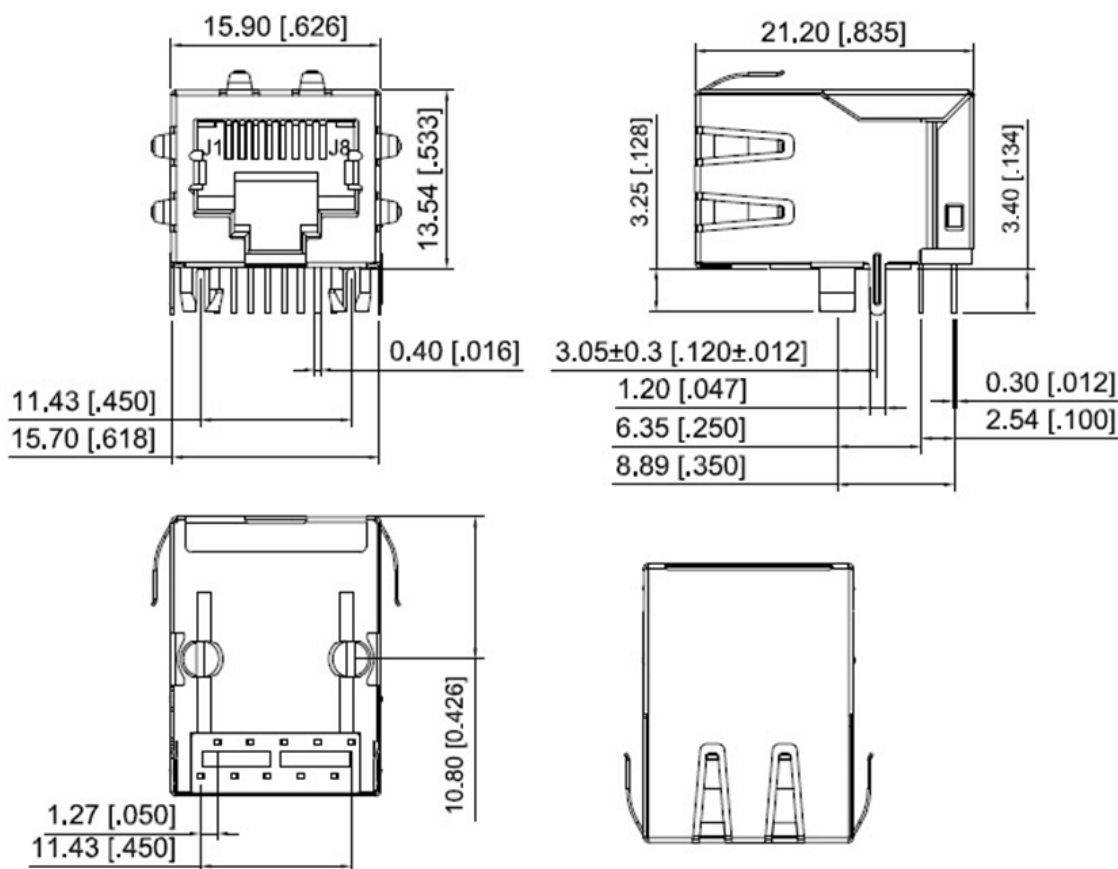


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## Mechanical Dimensions

W Shield, W EMI Fingers, Tab Down



Dimensions: mm[inch]

(Unless otherwise specified, all tolerances are ±0.25[0.010])



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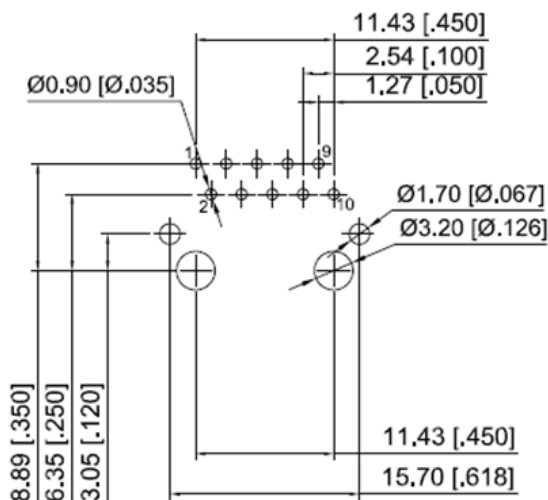


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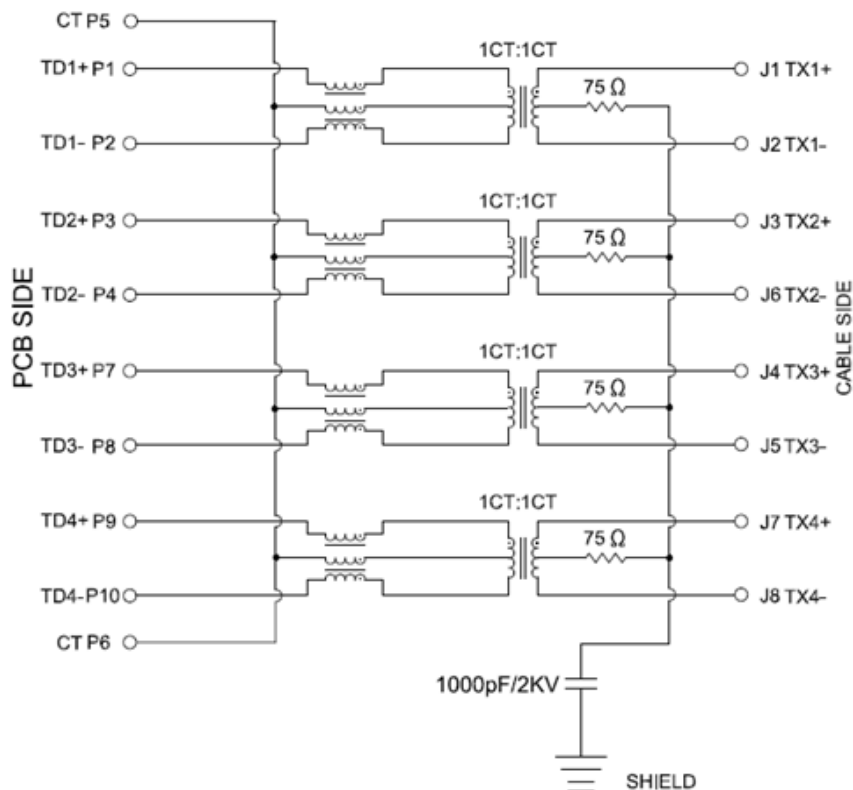
## Mechanical Dimensions

### Pin Layout



Dimensions: mm[inch]  
(Unless otherwise specified, all tolerances are  $\pm 0.05$ [0.002])

## Schematic



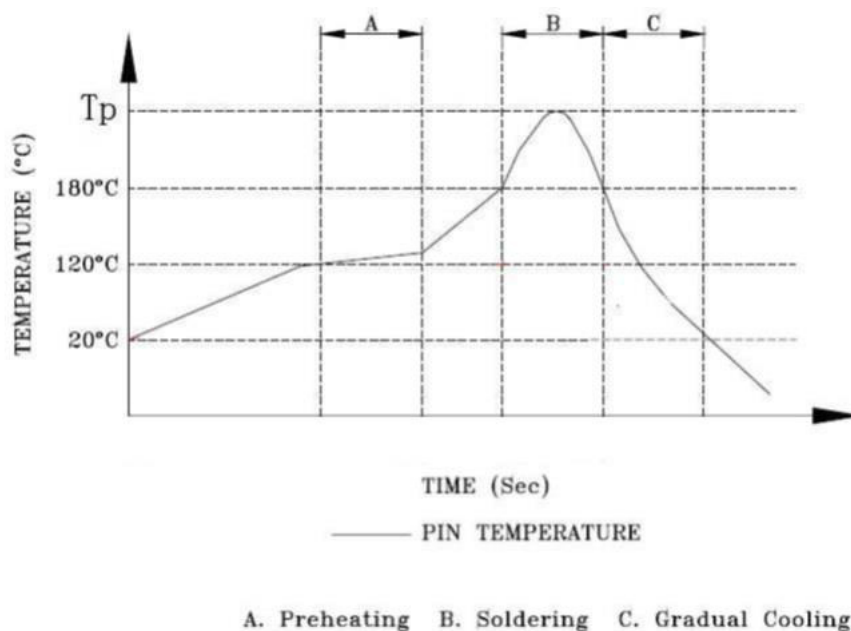
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## Wave Soldering Profile



Peak Temperature ( $T_p$ ) = 260 °C (max)

Peak Time ( $t_p$ ) = 10 s (max)

## Packaging

Pieces per Carton : 2000

Bulk/Tray per Carton : 50

Pieces per Bulk/Tray : 15 Kg

Dimension of the Carton: 535 x 305 x 240 mm

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