

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



ARJM12



31.2 x 21.3 x 13.6 mm
 UL Certification Number: E503350
 RoHS/RoHS II Compliant
 MSL = 1

Features

- IEEE 802.3 compliant and UL certified
- High performance integrated magnetics for EMI suppression
- Suitable for CAT5 and CAT6 UTP cabling
- RoHS peak wave solder temperature rating 265°C
- Extended operating temperature -40 to 85°C option

Applications

- 10, 100, 1000, 2.5G and 5G Base-T Ethernet
- Servers, switches and routers
- Set top boxes
- VoIP & IP communications
- Video surveillance
- Broadcast video
- Industrial computers & robotics

Options and Part Identification

ARJM12 - [] - [] - [] [] - [] []

Mechanical Series	Schematics	Left LED Color	Right LED Color	Operating Temperature	Gold Plating
A1: Tab down, w/EMI Fingers	009: 100 Base-T	N: No LED	N: No LED	CW: 0 ~ 70 °C	2: 6u"
A2: Tab down, w/o EMI Fingers	502: 1000 Base-T	A: Green	A: Green	EW: -40 ~ 85 °C	
	805: 2.5G Base-T	B: Yellow	B: Yellow		
	811: 5G Base-T				

*See Mechanical Dimension Section for Details

*See Schematic Section for Details

Example Configurations

ARJM12 A1-009 -AB- CW2

(1 x 2, Tab down, w/ EMI, 100Base-T, w/LED G/Y, commercial grade, 6µ" Gold)

*For additional schematics, gold plating, and LED configurations, contact Abracon Sales.



5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 01.28.2019

ABRACON IS
 ISO9001-2015
 CERTIFIED

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



ARJM12



31.2 x 21.3 x 13.6 mm
 UL Certification Number: E503350
 RoHS/RoHS II Compliant
 MSL = 1

Electrical Specifications

Parameters	Minimum	Typical	Maximum	Units	Notes
Turn Ratio ($\pm 3\%$)	1CT:1CT				100kHz, 0.1V
Inductance	350			μH	100kHz, 0.1V, 8mADC
	200				For 2.5G Base-T only
	160				For 5G Base-T only
Leakage Inductance			0.5	μH	100kHz, 0.1V
			0.3		For 2.5G Base-T and 5G Base-T
DC Resistance			1.5	Ω	
Hipot	2250			VDC	1mA Max Complies with IEEE 802.3
Operating Temperature	-40		+85	$^{\circ}\text{C}$	See options
Storage Temperature	-40		+85	$^{\circ}\text{C}$	
100 Base-T					
Insertion Loss	-1.1			dB	0.5-100MHz
Return Loss			-18	dB	0.5-30MHz
			$-18+20\log(f/30)^*$		30.1-60MHz
			-12		60.1-80MHz
Crosstalk			-35	dB	0.5-40MHz
			$-33+20\log(f/50)^*$		40.1-100MHz
CMRR			-30	dB	0.5-100MHz
1000 Base-T					
Insertion Loss	-1.1			dB	0.5-100MHz
Return Loss			-18	dB	0.5-40MHz
			$-12+20\log(f/80)^*$		40.1-100MHz
Crosstalk			-35	dB	0.5-40MHz
			$-33+20\log(f/50)^*$		40.1-100MHz
CMRR			-30	dB	0.5-100MHz
2.5G Base-T					
Insertion Loss	-0.5			dB	1-50MHz
	-1.0				50-125MHz
Return Loss			-20	dB	1-40MHz
			$-20+15\log(f/40)^*$		40-200MHz
Crosstalk			-30	dB	25-125MHz
5G Base-T					
Insertion Loss	-0.5			dB	1-50MHz
	-1.0				50-125MHz
	-2.0				125-250MHz
Return Loss			-20	dB	1-40MHz
			$-20+15\log(f/40)^*$		40-250MHz
Crosstalk			-30	dB	1-125MHz
			-25		125-250MHz

*f represents the test frequency specified in MHz



5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 01.28.2019

ABRACON IS
 ISO9001-2015
 CERTIFIED

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



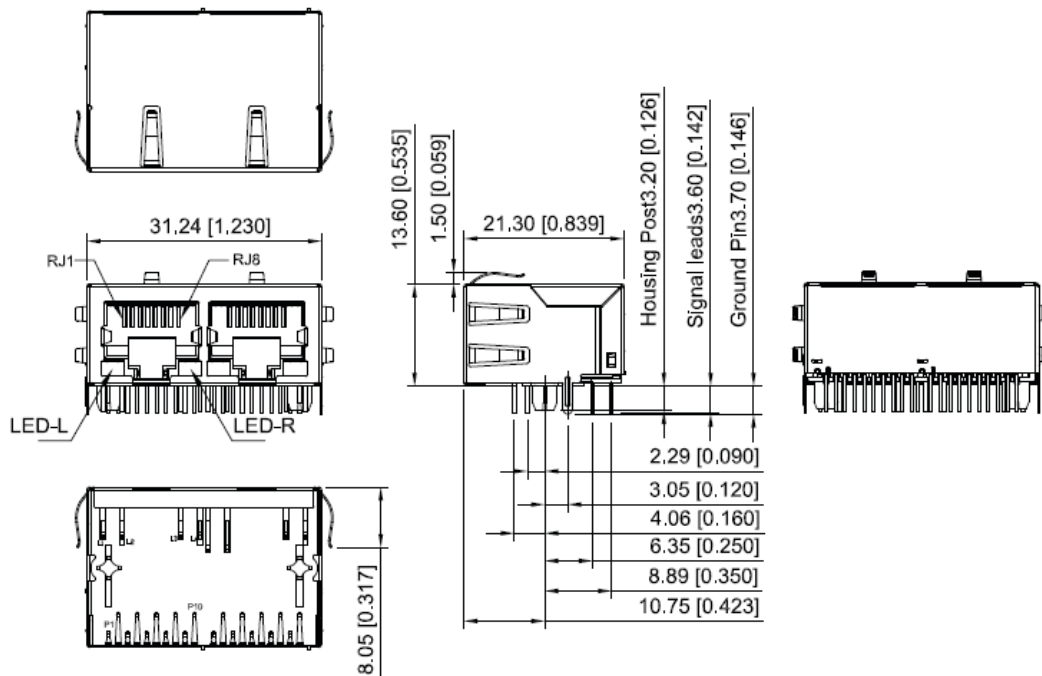
ARJM12



31.2 x 21.3 x 13.6 mm
UL Certification Number: E503350
RoHS/RoHS II Compliant
MSL = 1

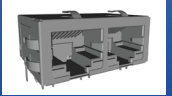
Mechanical Dimensions

A1: 1 x 2, Tab down, w/ EMI Fingers



Dimensions: mm[inch] (Unless otherwise specified, all tolerances are ± 0.25 [0.010])

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



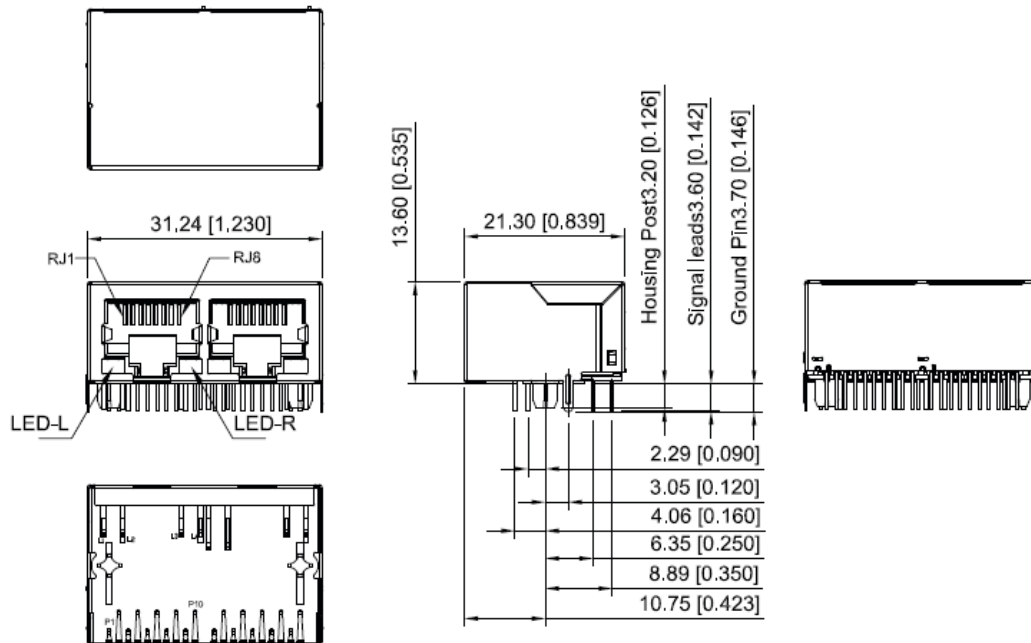
ARJM12



31.2 x 21.3 x 13.6 mm
UL Certification Number: E503350
RoHS/RoHS II Compliant
MSL = 1

Mechanical Dimensions

A2: 1 x 2, Tab down, w/o EMI Finger



Dimensions: mm[inch] (Unless otherwise specified, all tolerances are ± 0.25 [0.010])

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



ARJM12

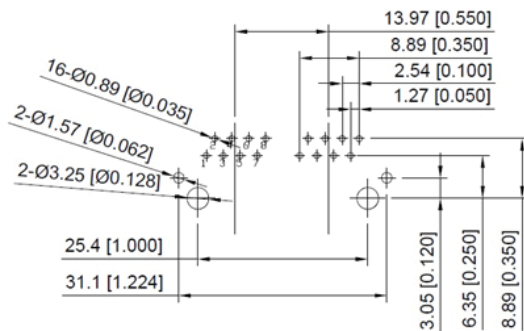


31.2 x 21.3 x 13.6 mm
 UL Certification Number: E503350
 RoHS/RoHS II Compliant
 MSL = 1

Mechanical Dimensions

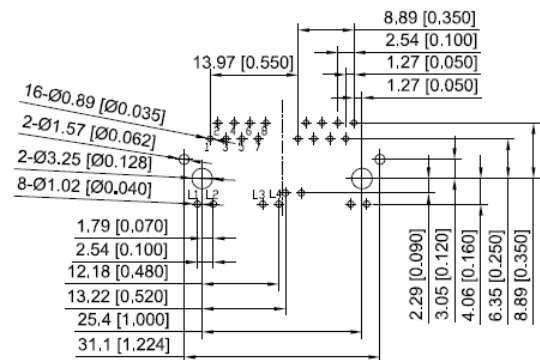
Recommended Land Pattern

**8 Pins, no LED
 For 100 Base-T**



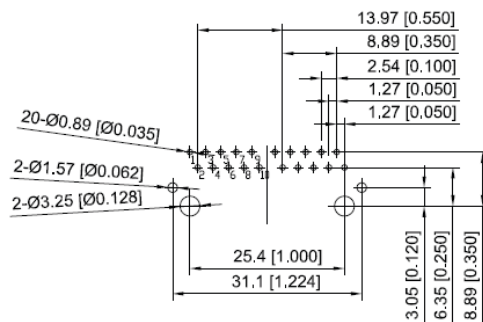
Top View Customer Board (COMP Side)

**8 Pins, w/ LED
 For 100 Base-T**



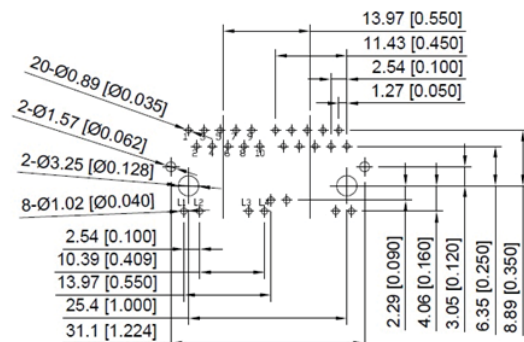
Top View Customer Board (COMP Side)

**10 Pins, no LED
 For 1000/2.5G/5G Base-T**



Top View Customer Board (COMP Side)

**10 Pins, w/ LED
 For 1000/2.5G/5G Base-T**



Top View Customer Board (COMP Side)

Dimensions: mm[inch]

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



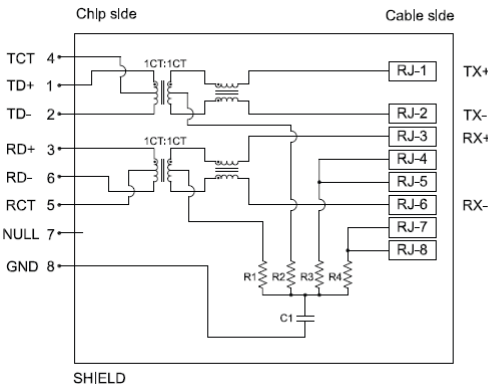
ARJM12



31.2 x 21.3 x 13.6 mm
 UL Certification Number: E503350
 RoHS/RoHS II Compliant
 MSL = 1

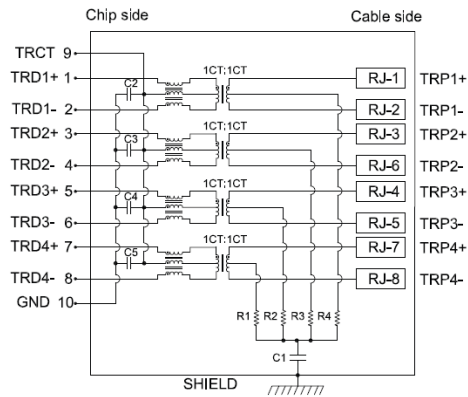
Schematic

009 (100 Base-T)



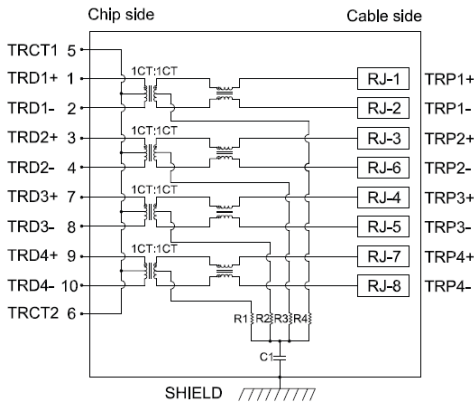
Note:
 R1-R4=75 OHMS, Resistors.
 C1=2KV 1000pF, Capacitor.

805 (2.5G Base-T)



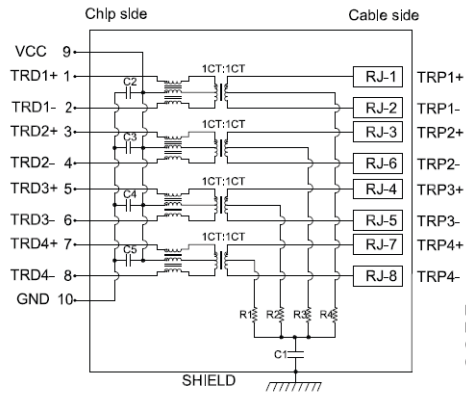
Note:
 R1-R4=75 OHMS, Resistors.
 C1=2KV 1000pF, Capacitor.
 C2-C5=100V 100nF, Capacitor.

502 (1000 Base-T)



Note:
 R1-R4=75 OHMS, Resistors.
 C1=2KV 1000pF, Capacitor.

811 (5G Base-T)



Note:
 R1-R4=75 OHMS, Resistors.
 C1=2KV 1000pF, Capacitor.
 C2-C5=100V 100nF, Capacitor.

Contact Abracon Sales for additional configurations.



5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 01.28.2019

ABRACON IS
 ISO9001-2015
 CERTIFIED

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T



ARJM12



31.2 x 21.3 x 13.6 mm
UL Certification Number: E503350
RoHS/RoHS II Compliant
MSL = 1

Materials

Housing:

Material:
PBT, UL94V-0
Standard Color: Black

Insert:

Material:
PBT, UL94V-0
Contact Material: Phosphor Bronze
Plating (1): Nickel
Plating (2): Gold, 6u"

Metal Shell:

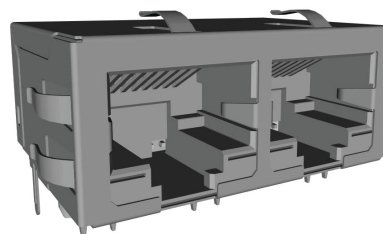
Material: Brass
Plating (1): Nickel

Contact Pin:

Material: Phosphor Bronze
Plating (1): Nickel
Plating (2): 100%Sn

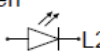

LED:

Material: Diffused Epoxy Lens, 0.5x0.5mm Carbon Steel wireframe leads



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

**LED Specification. @20mA Forward Current
AB (Left: Green – Right: Yellow) :**

LED-L	LED-R
Green L1 →  L2	Yellow L3 →  L4

Color	Green	Yellow
Wavelength	565nm Typ	585nm Typ
Forward Voltage	2.2V Typ	2.1V Typ

Contact Abracon Sales for additional configurations.

RJ45 1x2 Multiport 100/1000/2.5G/5G Base-T

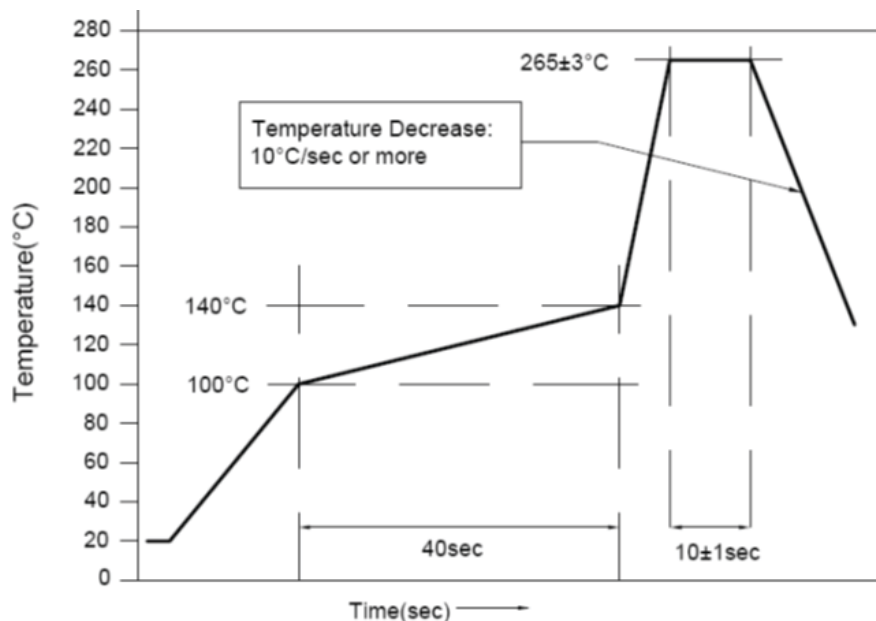


ARJM12



31.2 x 21.3 x 13.6 mm
 UL Certification Number: E503350
 RoHS/RoHS II Compliant
 MSL = 1

Wave Soldering Profile



Packaging

Series	Approximate Weight / Pc	Approximate Weight / Carton	Qty / Carton (pcs)	Carton Dimensions (LxWxH)
ARJM12	10.82 g	5040 g	350	340 x 215 x 275 mm

ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669
 Phone: 512-371-6159 | Fax: 512-351-8858
 For terms and conditions of sales, please visit:
www.abracon.com

REVISED: 01.28.2019

ABRACON IS
 ISO9001-2015
 CERTIFIED



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.