RJ45, 1x4 Multi Port, 10/100/1G Base-T Magnetics Module

ARJM14 Series

Request Samples | Check Inventory

59.0 x 21.4 x 13.6 mm
RoHS/RoHS II Compliant
MSL Level = 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

- Multiport 10/100/1G Base-T LAN
- Network Interface Cards
- High Density Data Center Switches
- NAS / Expander storage
- Data Center Servers, Routers
- Media converters

Electrical Specifications

Parameters	Minimum	Typical	Maximum	Units	Notes
Turn Ratio (±3%)		1CT:1CT			100kHz, 0.1V
Inductance	350			µH	100kHz, 0.1V, 8mADC
Hipot	2250			VDC	1mA Max Complies with IEEE 802.3
Operating Temperature	-40		+85	°C	See options
Storage Temperature	-40		+85	°C	
Insertion Loss	-1.0			dB	0.3-100MHz
Return Loss			-18	dB	1-30MHz
			-16		30-60MHz
			-12		60-80MHz
			-10		80-100MHz
Crosstalk			-30	dB	1-100MHz
CMRR			-30	dB	1-100MHz

ARJM24 Series is RoHS/RoHS II Compliant

MSL level: 1

UL Certification Number: E503350

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Part Number Identification

ARJM14 □ - □ - □ □ - □ □

ARJM14	Mechanical	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	EW: -40 ~ 85 °C	2: 6u”
		502: 1000 Base-T	A: Green	B: Yellow		

See Mechanical Dimension Section for Details

See Schematic Section for Details

Available Part Numbers

Part Number	Speed	Tab Direction	LED (Left:Right)	Operating Temperature	Solder Method	Gold Plating
ARJM14A1-009-AB-EW2	10/100 Base-T	Down	G : Y	-40°C ~ 85°C	Wave	6µ”
ARJM14A1-009-NN-EW2	10/100 Base-T	Down	none	-40°C ~ 85°C	Wave	6µ”
ARJM14A1-502-AB-EW2	1000 Base-T	Down	G : Y	-40°C ~ 85°C	Wave	6µ”

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Materials

1. **Housing:**
   Material:
   PBT, UL94V-0
   Standard Color: Black

2. **Contact Pin:**
   Material: Phosphor Bronze
   Plating (1): Nickel
   Plating (2): 100%Sn

3. **Insert:**
   Material:
   PBT, UL94V-0

   Contact Material: Phosphor Bronze
   Plating (1): Nickel
   Plating (2): Gold, 6u”

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

5. **Metal Shell:**
   Material: Brass
   Plating (1): Nickel

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

RJ45, 1x4 Multi Port, 10/100/1G Base-T Magnetics Module

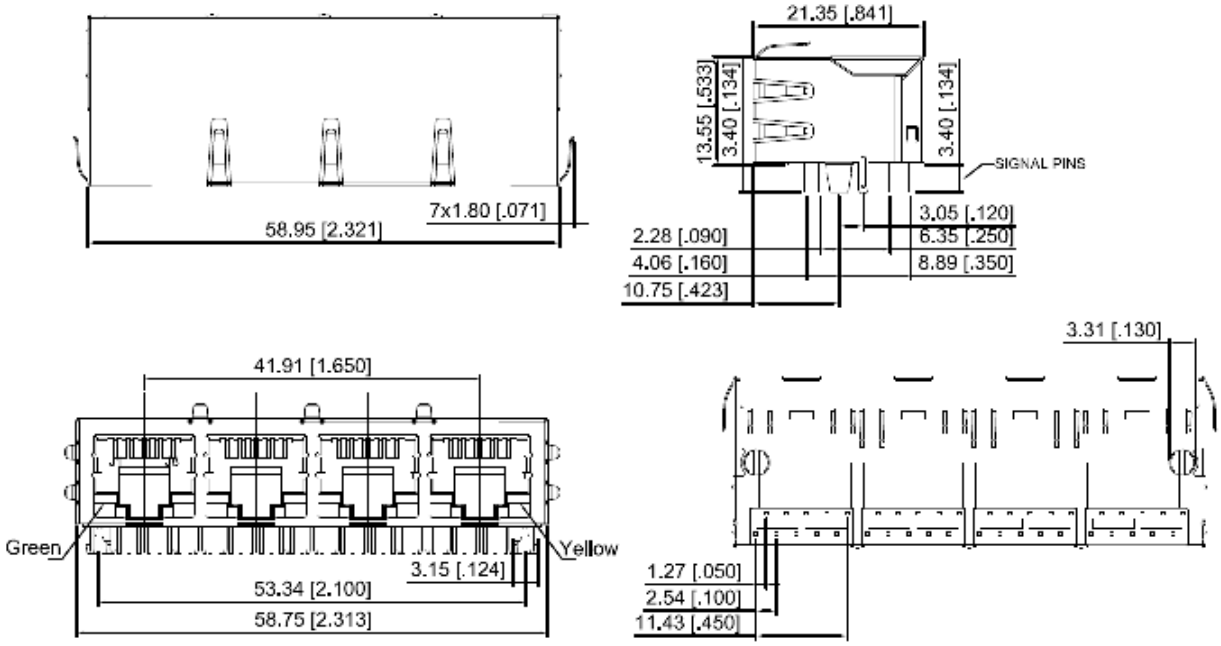
ARJM14 Series

Request Samples | Check Inventory

59.0 x 21.4 x 13.6 mm
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications

A1: 1 x 4, w/ EMI Fingers



Dimensions are in mm[inches]. Unless otherwise noted, tolerance is ±0.25mm[0.010]

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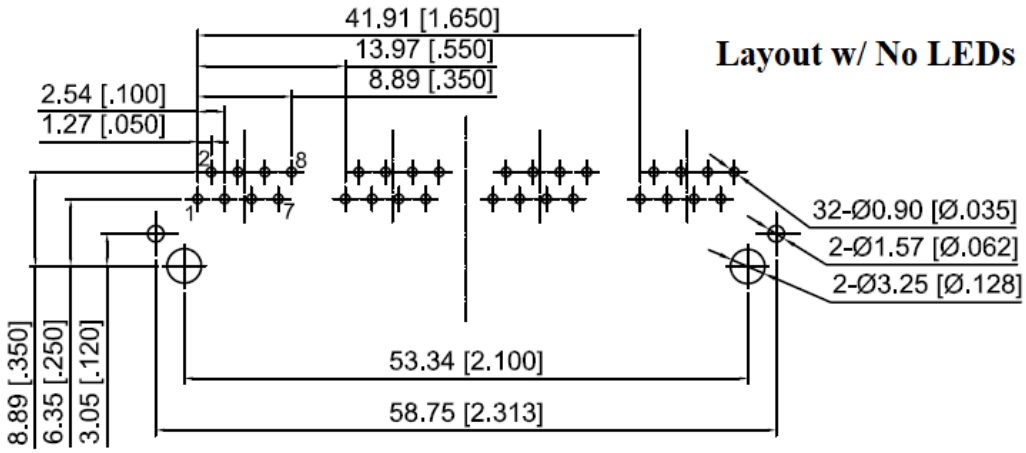
ARJM14 Series

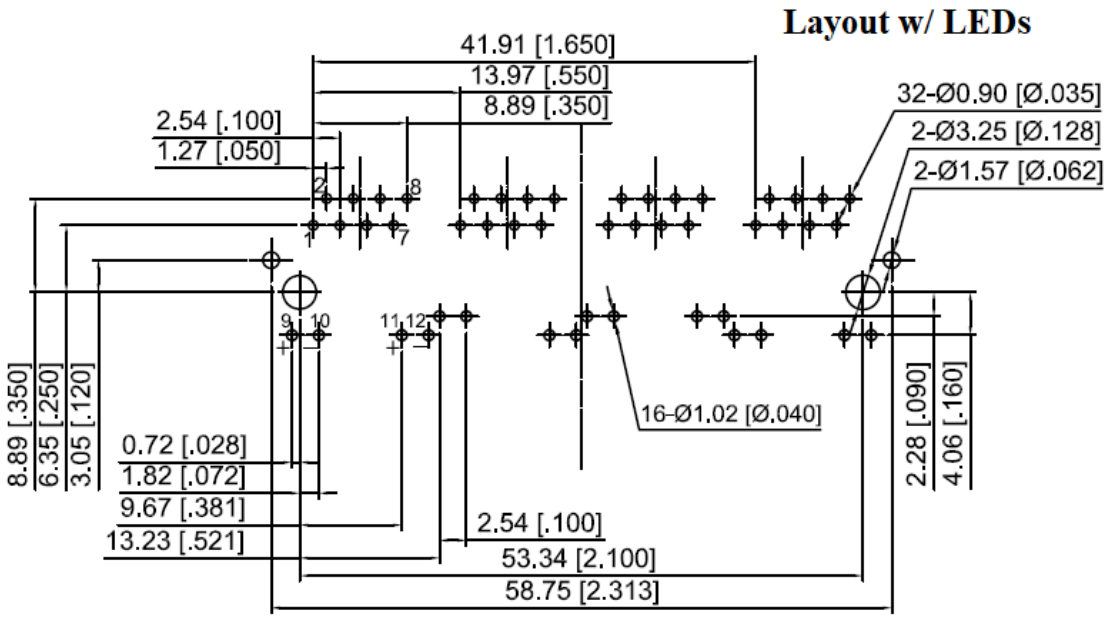
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59.0 x 21.4 x 13.6 mm
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MSL Level = 1

Recommended Layout

10/100 Base-T





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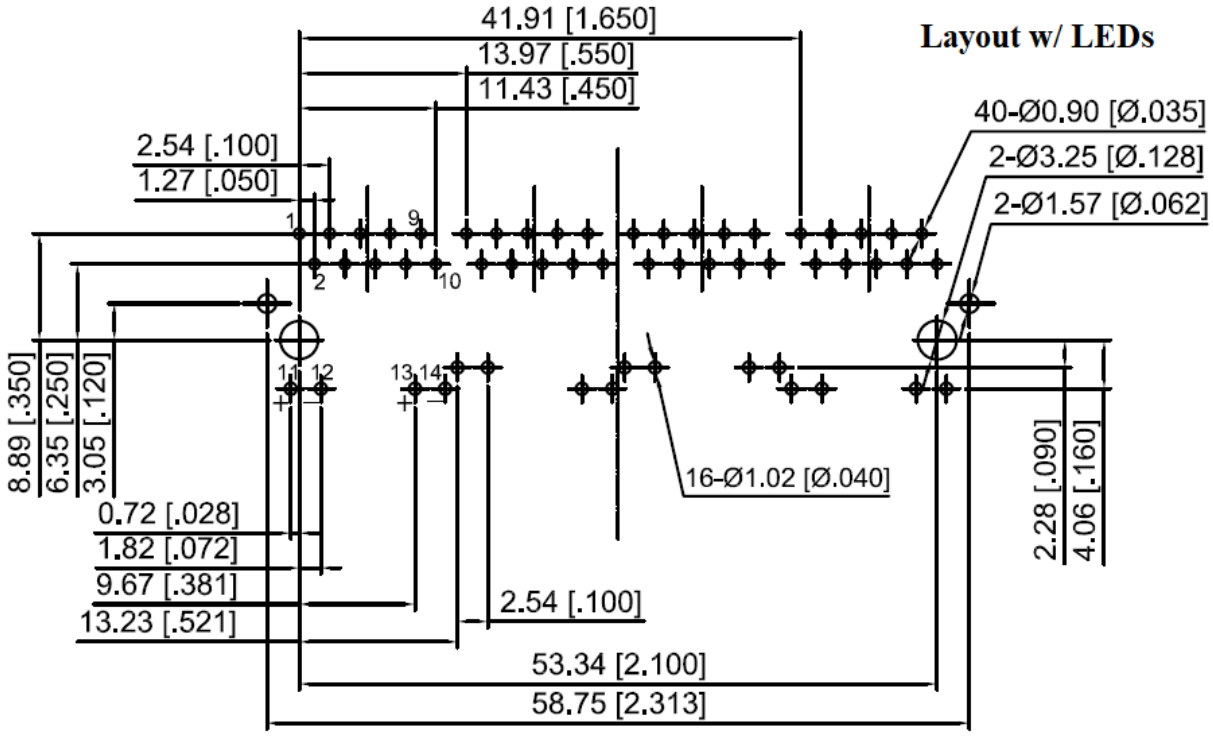
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1000 Base-T



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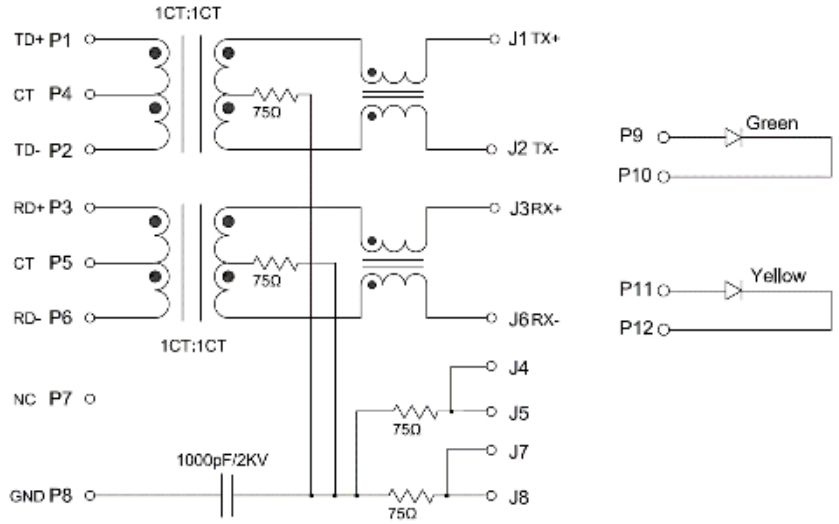
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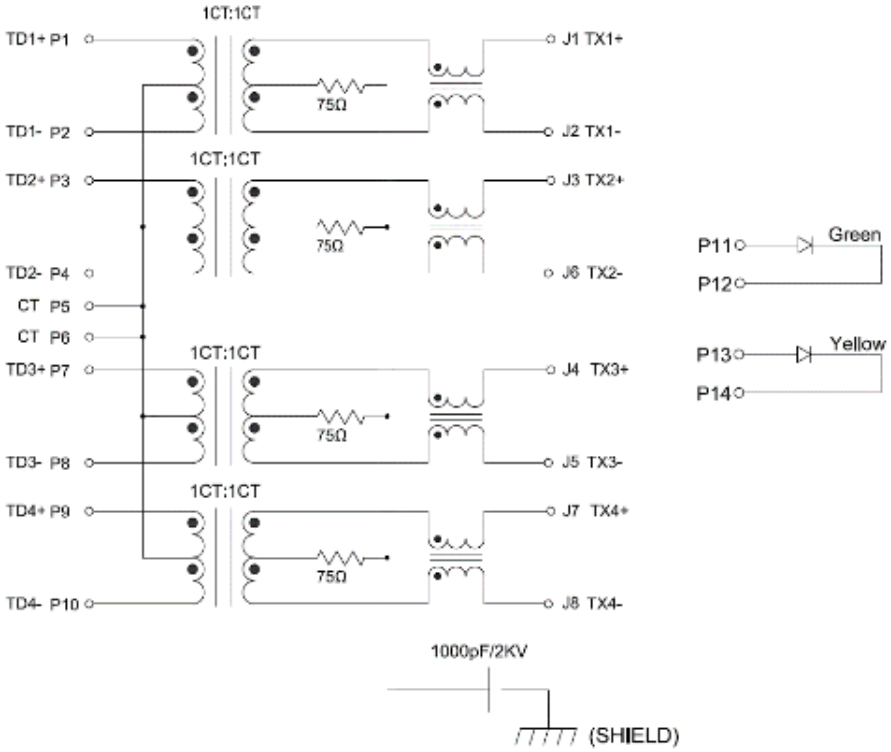
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MSL Level = 1

Schematic

A12 (10/100 Base-T)



502 (1000 Base-T)



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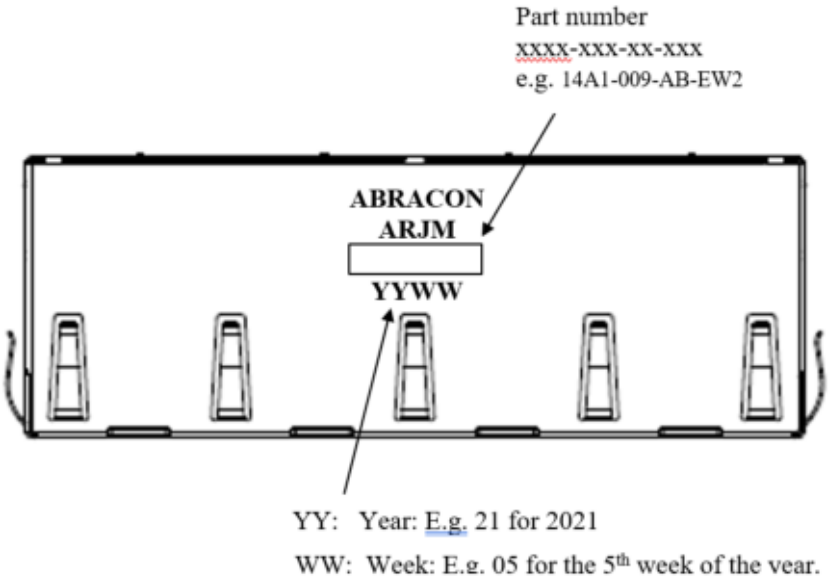
LED SPECIFICATION. @20mA Forward Current

AB option (Left: Green – Right: Yellow)

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

NN option (no LEDs)

Part Marking



Marking Method = Laser Marking

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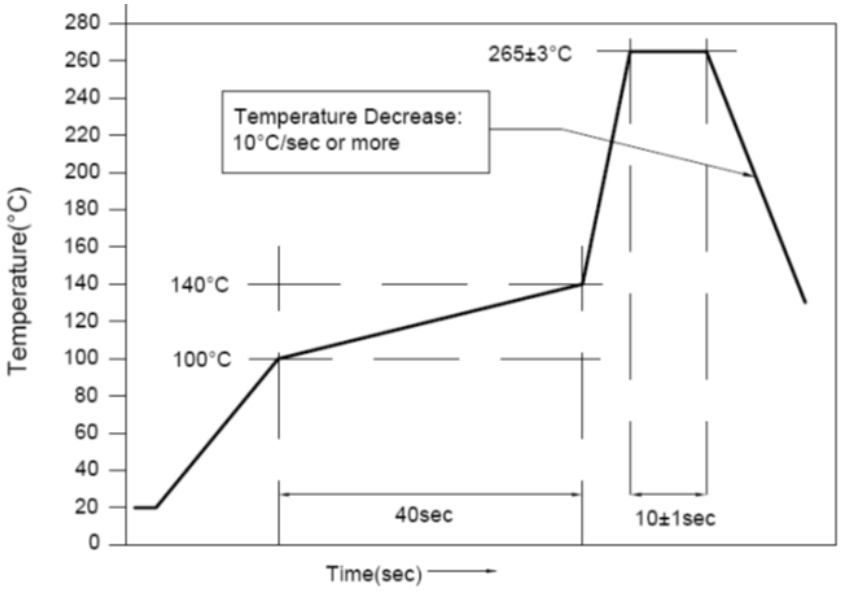
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Wave Profile



Packaging

Series	Approximate Weight / Pc	Approximate Weight / Carton	Qty / Carton (pcs)	Tray / Carton	Pcs/ Tray	Carton Dimensions (LxWxH)
ARJM14	21.0g	11.0Kg	400	20	20	340 x 215 x 275 mm

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