

# RJ45 10 Base-T Jack with Magnetic Module

ARJ11A

RoHS/RoHS II Compliant



16.26 x 13.84 x 21.59mm

## FEATURES:

- Available with or without LED
- Suitable CAT 5 & 6 cable and UTP
- Comply IEEE 802.3ab
- LAN Magnetic with RJ4
- Suitable for RoHS compliant reflow

## APPLICATIONS:

- 10Base-T LAN
- NIC, LoM and PC

## STANDARD SPECIFICATIONS at 25°C

Operating temperature range: 0°C to +70°C Storage temperature range: -40°C to +125°C

Part Number	Turns Ratio TX/RX (±5%)	EMI fingers	LED (L/R)	Insertion Loss (dB Max)	
				1-10MHz	
ARJ11A-MASA-KT-2	1CT:1.41/1CT:1	No	---	-1	
ARJ11A-MASA-MU-2	1CT:1CT/1CT:1CT	No	---	-1	
ARJ11A-MBSC-A-B-FMU2	1CT:1CT/1CT:1CT	No	G/Y	-1	
ARJ11A-MASD-MU-2	1CT:1CT/1CT:1CT	No	---	-1	
ARJ11A-MASE-MU2	1CT:1CT/1CT:1CT	No	---	-1	
ARJ11A-MASF-LT2	1CT:1/1CT:1	No	---	-1	
ARJ11A-MASG-LT2	1CT:1/1CT:1	No	---	-1	
ARJ11A-MASH-KU2	1.414:1CT/1CT:1CT	No	---	-1.15	
ARJ11A-MCSI-B-A-EKU2	1CT:1.41CT/1CT:1CT	Yes	Y/G	-1	
ARJ11A-MASJ-MU2	1CT:1CT/1CT:1CT	No	---	-1	
ARJ11A-MASK-PU2	1:2CT/1CT:1CT	No	---	-1.15	
ARJ11A-MASL-QU2	1:1.414CT/1CT:1CT	No	---	-1.15	
ARJ11A-MASM-RT2	1CT:2.5/1CT:1	No	---	-1	
ARJ11A-MDSN-MU2	1CT:1CT/1CT:1CT	Yes	---	-1	
ARJ11A-MDSO-MU2	1CT:1CT/1CT:1CT	Yes	---	-1	

Part Number	Attenuation TX/RX (dBMIN)				Return Loss TX & RX @100Ω±15Ω (dB MIN)		Crosstalk (dB MIN)	CMR (dB MIN)	Hipot (Vrms) 0.5mA, 2sec
	20MHz	25MHz	30MHz	40MHz	1-10 MHz	5-10MHz			
ARJ11A-MASA-KT-2	-7/-5	-18/-11	-28/-16	-33/-26	---	-13.5	-30	-30	1500
ARJ11A-MASA-MU-2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-13.5	-30	-30	1500
ARJ11A-MBSC-A-B-FMU2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-14	-30	-30	1500
ARJ11A-MASD-MU-2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-15	-30	-30	1500
ARJ11A-MASE-MU2	---	---	-30/-20	---	-15	---	-30	---	1500
ARJ11A-MASF-LT2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-13.5	-30	---	1500
ARJ11A-MASG-LT2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-15	-30	---	1500
ARJ11A-MASH-KU2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-17 Typ	-30	-30	1500
ARJ11A-MCSI-B-A-EKU2	---	---	-30/-18	---	-15	---	-30	---	1500
ARJ11A-MASJ-MU2	-5/-4.2	-18/-11	-28/-16	-33/-26	---	-17 Typ	-30	-30	1500
ARJ11A-MASK-PU2	-5/-4.2	-18/-11	-28/-16	-33/-26	-13.5	---	-30	-30	1500
ARJ11A-MASL-QU2	-5/-4.2	-18/-11	-28/-16	-33/-26	-13.5	---	-30	-30	1500
ARJ11A-MASM-RT2	---	---	---	---	---	-15	---	-25	1500
ARJ11A-MDSN-MU2	-7/-6	-19/-14	-30/-20	-32/-31	---	-17	-30	---	1500
ARJ11A-MDSO-MU2	---	---	-30/-18	---	-15	---	-30	---	1500

CMR: Common Mode Rejection

Contact Abracon for more custom configurations. See options to build a custom configuration

ABRACON IS  
ISO 9001:2008  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

Revised: 03.06.13

# RJ45 10 Base-T Jack with Magnetic Module

ARJ11A

RoHS/RoHS II Compliant



16.26 x 13.84 x 21.59mm

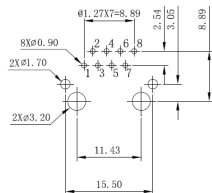
## OPTIONS AND PART IDENTIFICATION

ARJ11A -  -  -  -  -  -  -  -

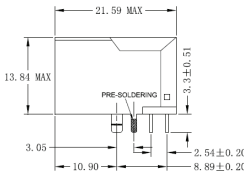
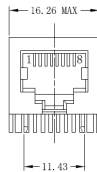
Mechanical	Schematic	Left LED color (e.g. B for Yellow, AB for Green-Yellow)	Right LED color (e.g. B for Yellow, AB for Green-Yellow)	LED polarity	Turns Ratio (Tx)	Turns Ratio (Rx)	Gold plating
MA ~ MD (Please see mechanical section)	SA ~ SO (Please see schematic section)	Blank: No LED A: Green B: Yellow C: Amber D: Orange	Blank: No LED A: Green B: Yellow C: Amber D: Orange	Blank: No LED E ~ J (Please see 7.0 LED polarity section)	K: 1CT:1.41 L: 1CT:1 M: 1CT:1CT N: 1.414:1CT O: 1CT:1.41CT P: 1:2CT Q: 1:1.414CT R: 1CT:2.5	S: 1CT:1.41 T: 1CT:1 U: 1CT:1CT V: 1.414:1CT W: 1CT:1.41CT X: 1:2CT Y: 1:1.414CT Z: 1CT:2.5	1: 3u “ 2: 6u “ 3: 15u “ 4: 30u “ 5: 50u “

## MECHANICAL DIMENSIONS

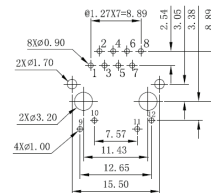
MA



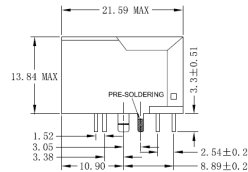
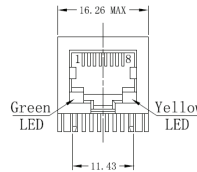
PC Board Layout  
Component Side Shown



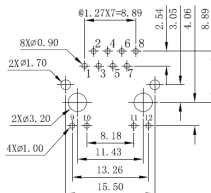
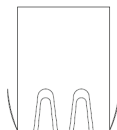
MB



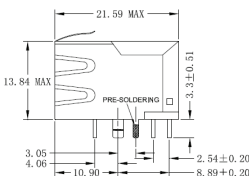
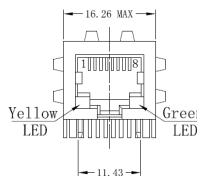
PC Board Layout  
Component Side Shown



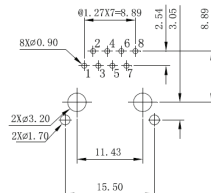
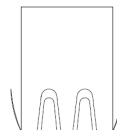
MC



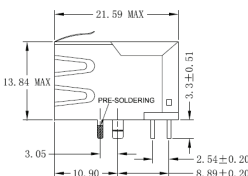
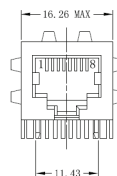
PC Board Layout  
Component Side Shown



MD



PC Board Layout  
Component Side Shown



ABRACON IS  
ISO 9001:2008  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

Revised: 03.06.13

# RJ45 10 Base-T Jack with Magnetic Module

ARJ11A

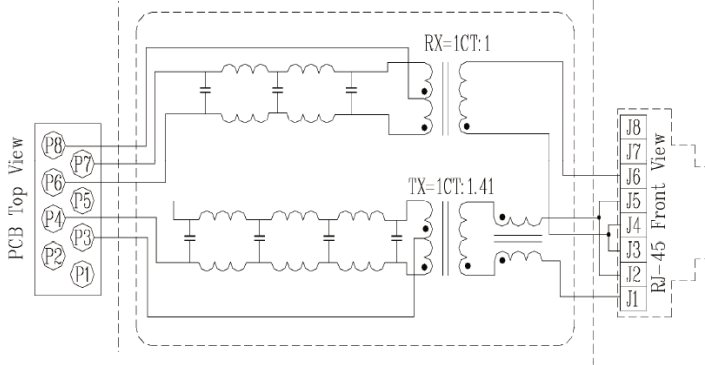
RoHS/RoHS II Compliant



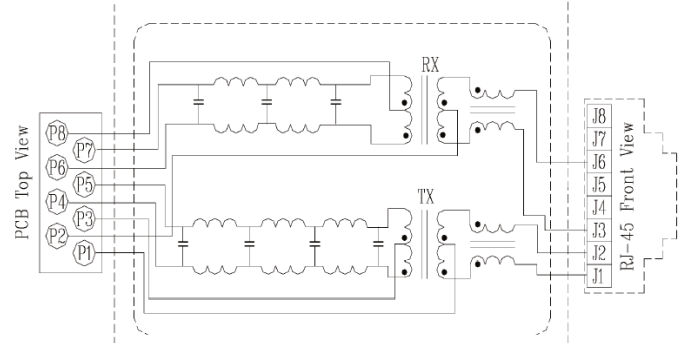
16.26 x 13.84 x 21.59mm

## SCHEMATICS

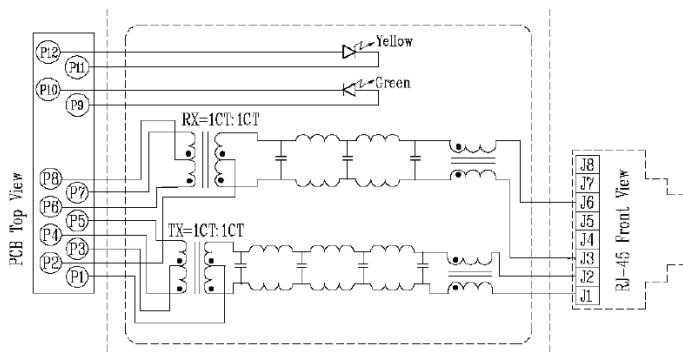
SA



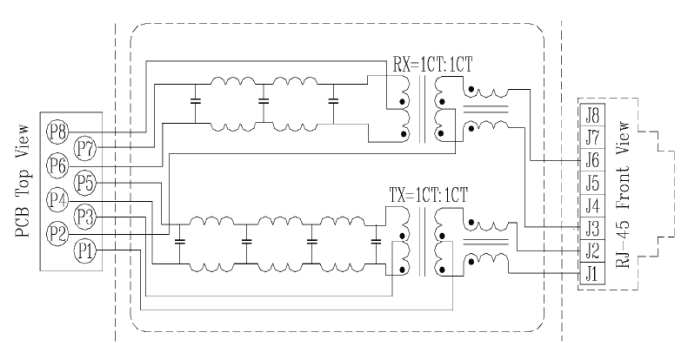
SB



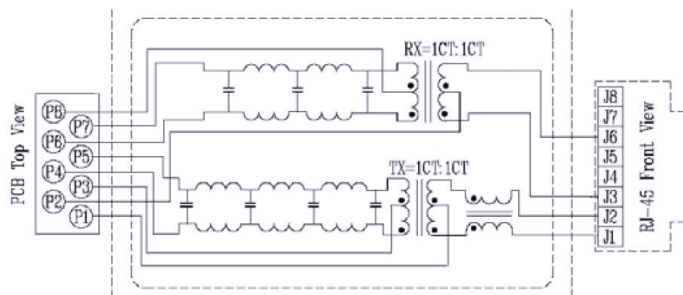
SC



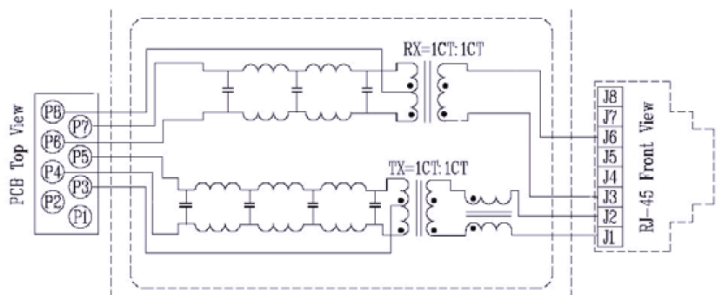
SD



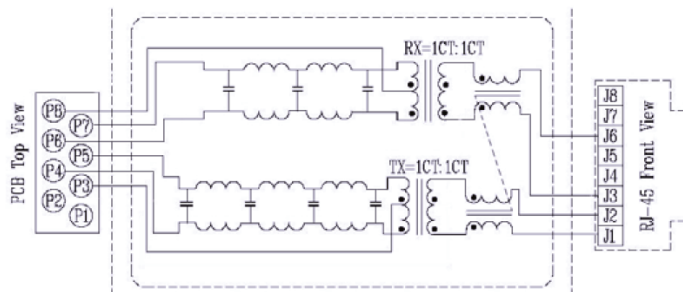
SE



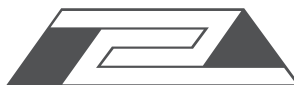
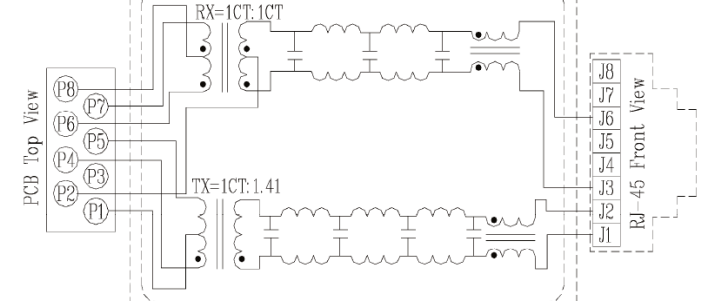
SF



SG



SH



# RJ45 10 Base-T Jack with Magnetic Module

ARJ11A

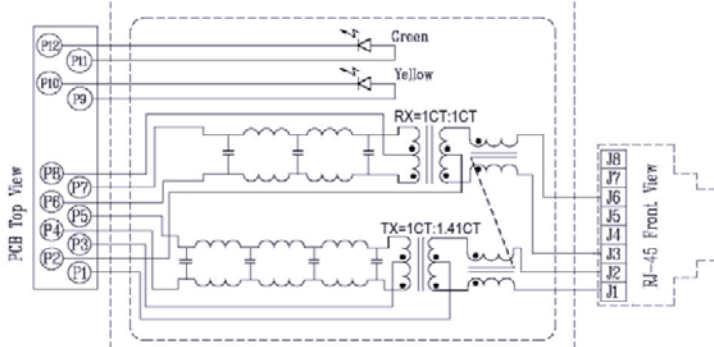
RoHS/RoHS II Compliant



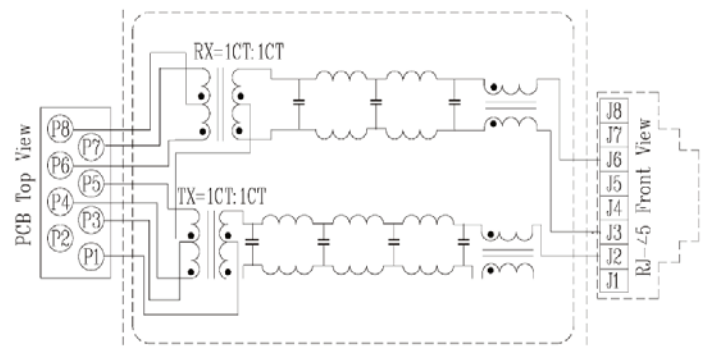
16.26 x 13.84 x 21.59mm

## SCHEMATICS - continued

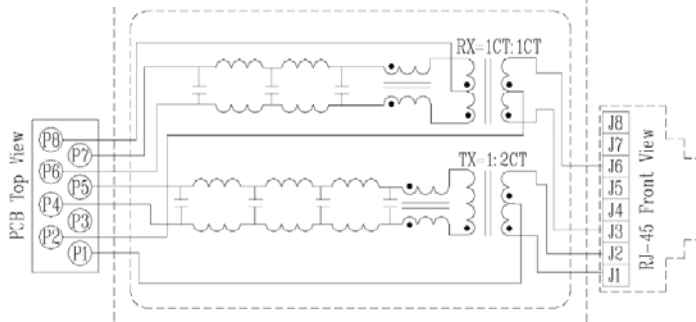
SI



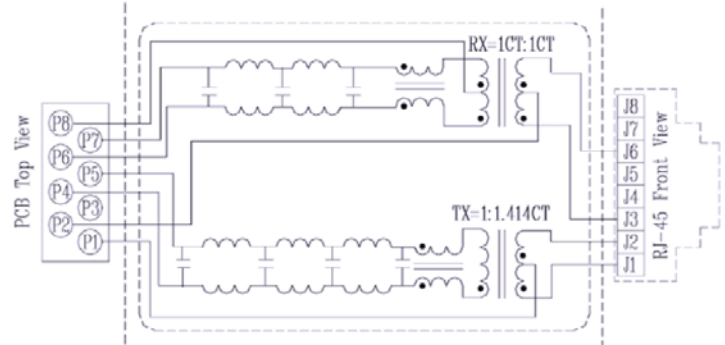
SJ



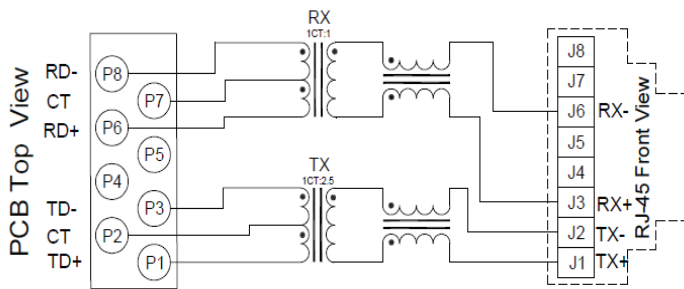
SK



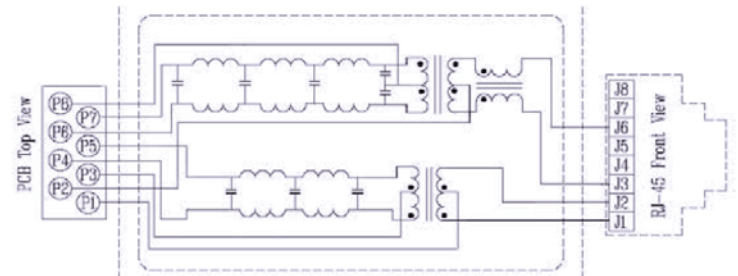
SL



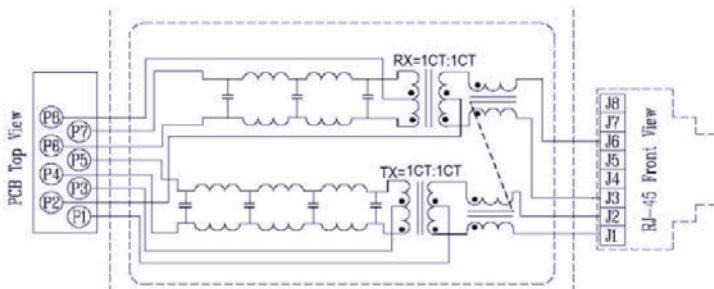
SM



SN



SO



# RJ45 10 Base-T Jack with Magnetic Module

ARJ11A

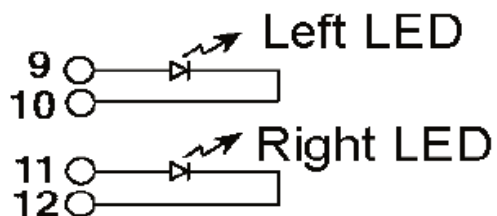
RoHS/RoHS II Compliant



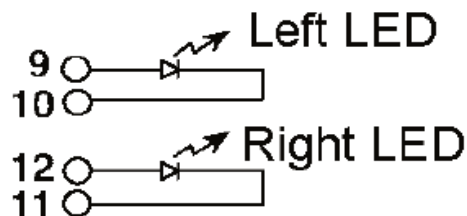
16.26 x 13.84 x 21.59mm

## LED POLARITY

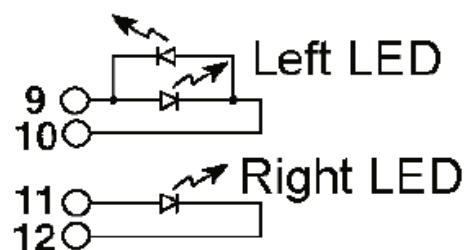
E



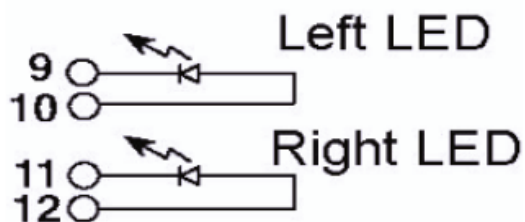
F



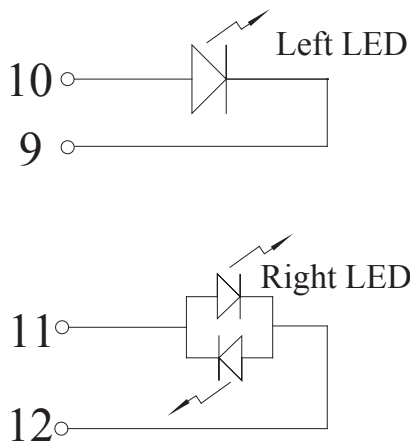
G



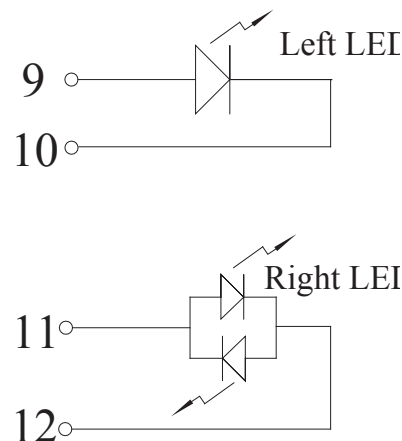
H



I



J



$V_{in}=2.1Vdc$  TYP.

2.5Vdc MAX.

# RJ45 10 Base-T Jack with Magnetic Module

ARJ11A

RoHS/RoHS II Compliant

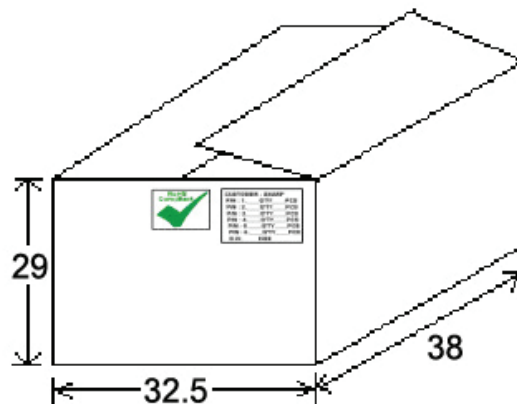
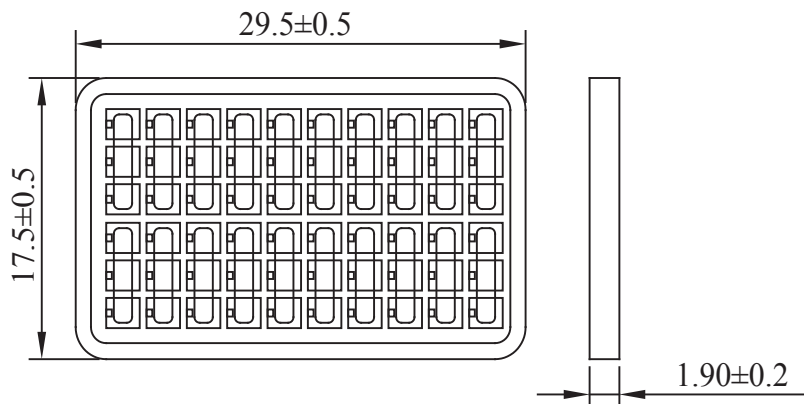


16.26 x 13.84 x 21.59mm

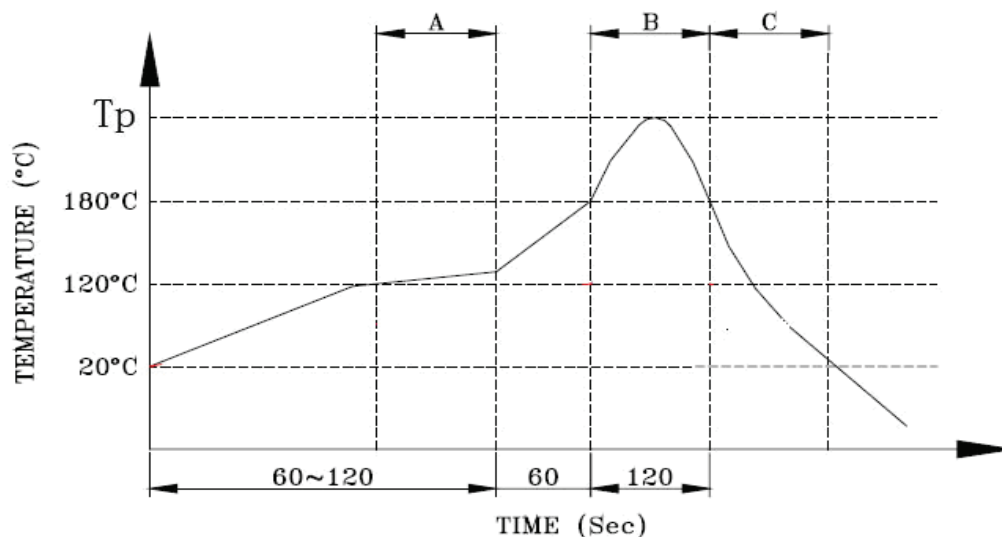
PACKING: 60pcs/tray

Packaging material: PET

Outer carton unit 1320 pcs/ 22 Trays/box



REFLOW PROFILE:

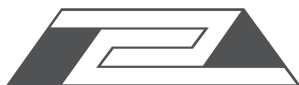


— PIN TEMPERATURE  
A. Preheating B. Soldering C. Gradual Cooling

Peak temperature(Tp) : 250± 10°C  
Peak temperature(Tp) time : 5sec max

**ATTENTION:** Abracon Corporation'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-dependant 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 Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO 9001:2008  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

Revised: 03.06.13