10/100/1000 BASE-T Dual Port SMD LAN Transformer Module



ALANS10002

Request Samples Check Inventory

27.8 X 12.2 X 7.2 MM
27.9 X 7.5 X 8.6 MM
RoHS/RoHS II Compliant
MSL Level = 1

Features

- Meets IEEE 802.3ab standards
- Compatible with 10 BASE-T, 100 BASE-TX, and 1000 Base-T
- Operating temperature range up to -40°C to +125°C
- RoHS Compliant
- High performance magnetics for EMI suppression and common mode noise rejection
- Multiple schematic and pinout options
- 1CT:1CT TX and RX Transformers

Applications

- Fast and gigabit Ethernet
- Servers, switches and routers
- IP cameras, surveillance, and phone
- Access points
- Industrial computers and robotics
- Networking and communications
- Broadcast video
- Set top box

Electrical Specifications

Part Number	Insertion Loss (dB Max)	Return Loss (dB Min)				Crosstalk (dB Min)			CMRR (dB Min)			DCMR (dB Min)		
	0.1-100 MHz	30 MHz	60 MHz	80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
ALANS10002-6NA1	0.8	18	15	12	10	44	38	34	45	40	35	46	38	33
ALANS10002-6N11	0.8	18	15	12	10	44	38	34	45	40	35	46	38	33
ALANS10002-6N41	0.8	18	15	12	10	44	38	34	45	40	35	46	38	33
ALANS10002-7PA1	0.8	18	15	12	10	44	38	34	45	40	35	46	38	33
ALANS10002-7P11	0.8	18	15	12	10	44	38	34	45	40	35	46	38	33

Part Number	Inductance (uH Min)	Leakage Inductance (uH Max)	Interwinding Capacitance (pF Max)	DC Resistance (Ω Max)		Hi Pot (VDC)	Weight (g)
Test Condition	@100kHz, 0.1V, 8mA DC Bias	@100kHz, 0.1V TD to MX	@100kHz, 0.1V TD to MX	Primary	Secondary	6 sec.	Per Piece
ALANS10002-6NA1	350	0.35	35	1.2	0.9	2500	3.2
ALANS10002-6N11	350	0.35	35	0.9	1.2	2500	3.2
ALANS10002-6N41	350	0.35	35	1.2	0.9	2500	3.2
ALANS10002-7PA1	350	0.35	35	1.2	0.9	2500	2.2
ALANS10002-7P11	350	0.35	35	0.9	1.2	2500	2.2

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Part Identification

ALANS10002- □ □ □ □

Package Size
6: 48-Pin
7: 50-Pin

Schematic	
48-Pin	**50-Pin**
NA1	PA1
N11	P11
N41	

Operating Temp.
E: 0 °C to +70 °C
D: -40 °C to +85 °C
J: -40 °C to +105 °C
K: -40 °C to +125 °C

Packaging
B: Bulk
T: Tape and Real**

**Package size “6: 48-Pin”: T= 300 pcs/reel

**Package size “7: 50-pin”: T= 400 pcs/reel

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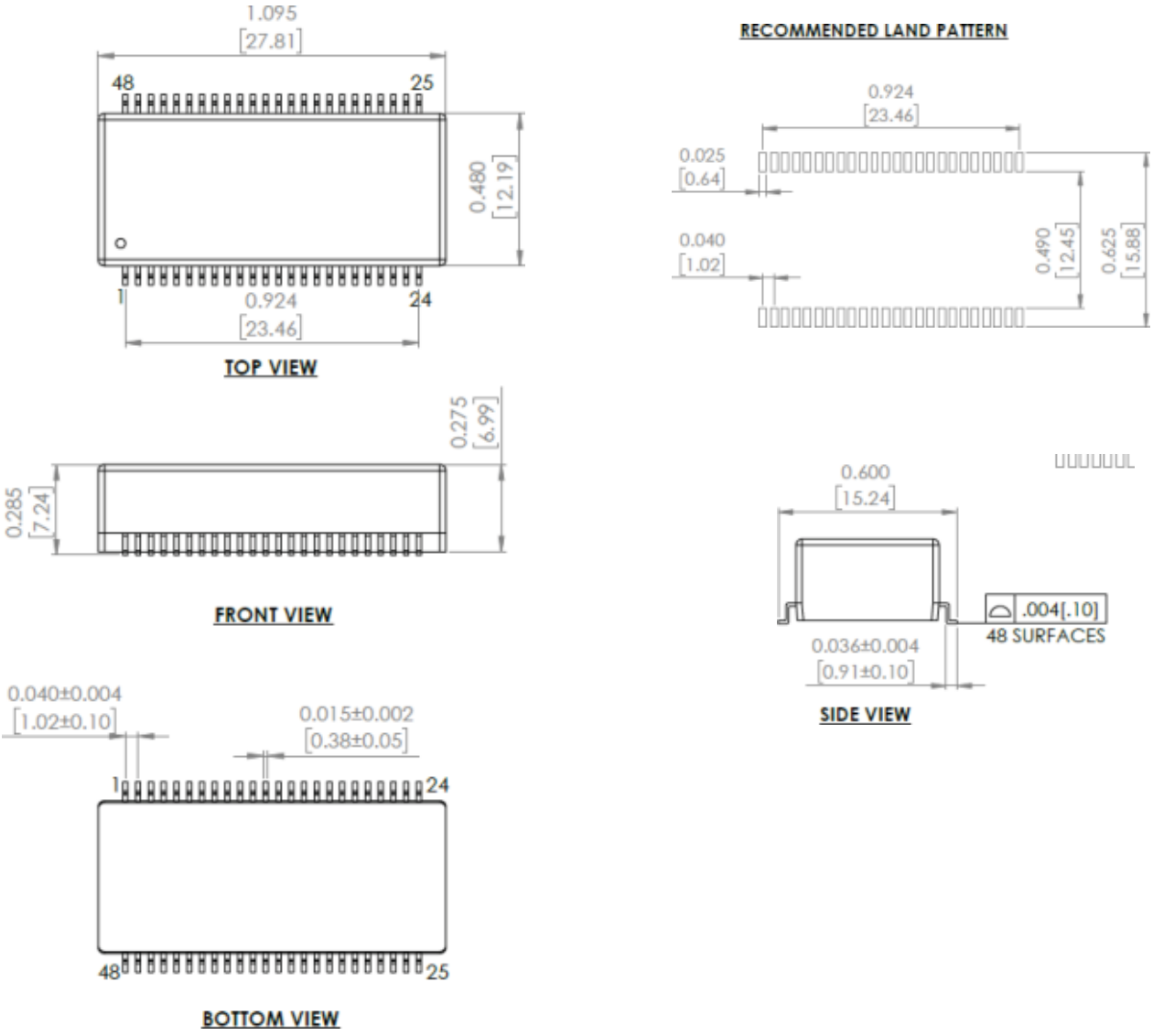
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Mechanical Specifications

6: 48-pin



Unless otherwise specified, all tolerances are ±0.25 in mm
Dimensions: inch/ [mm]

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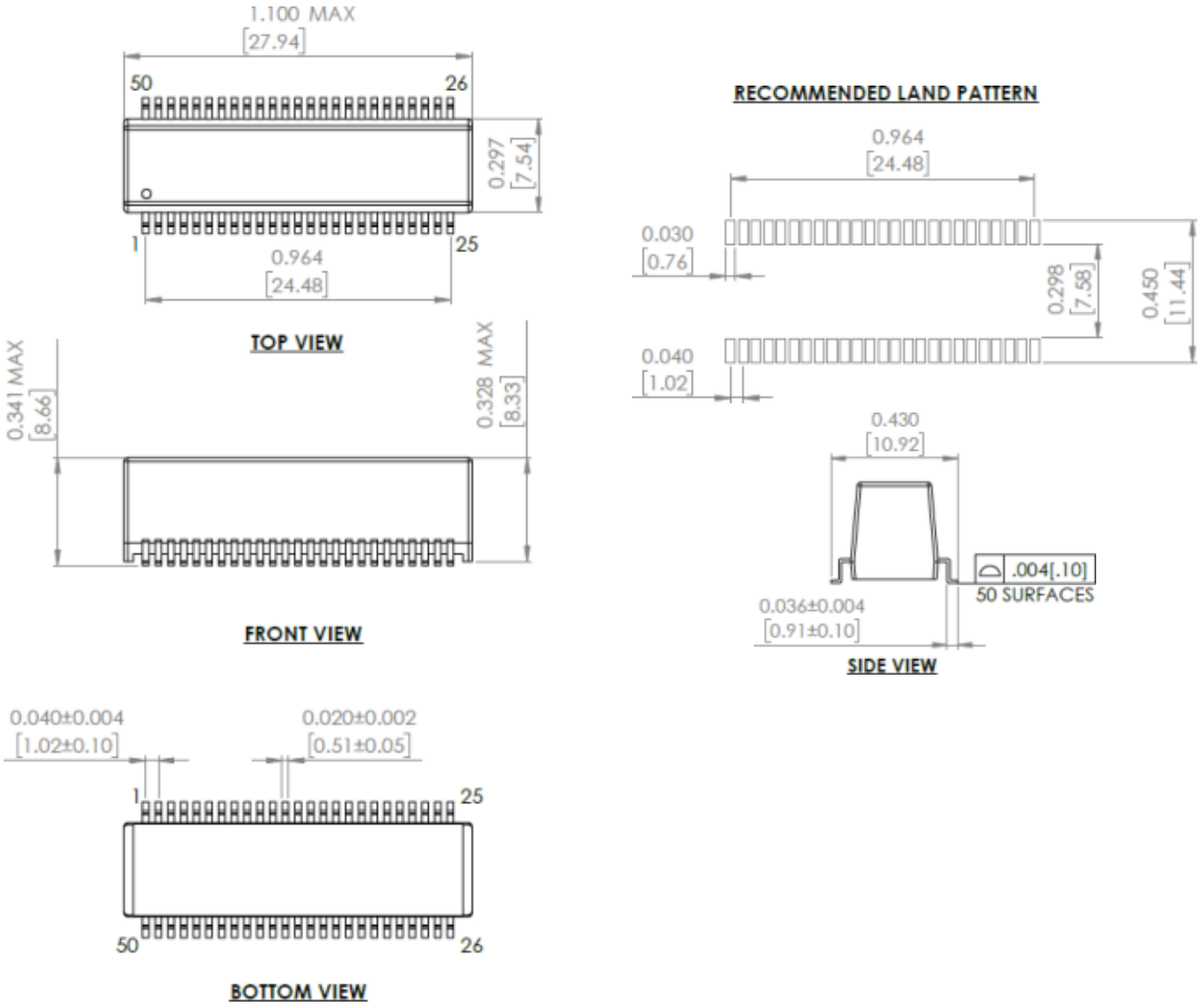
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MSL Level = 1

Mechanical Specifications

7: 50-pin



Unless otherwise specified, all tolerances are ±0.25 in mm
Dimensions: inch/ [mm]

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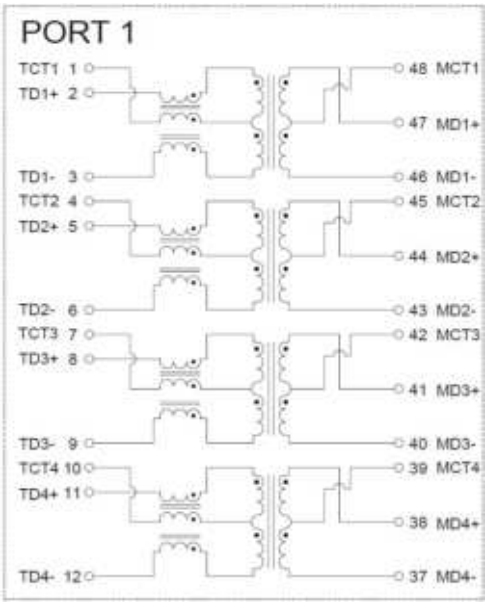
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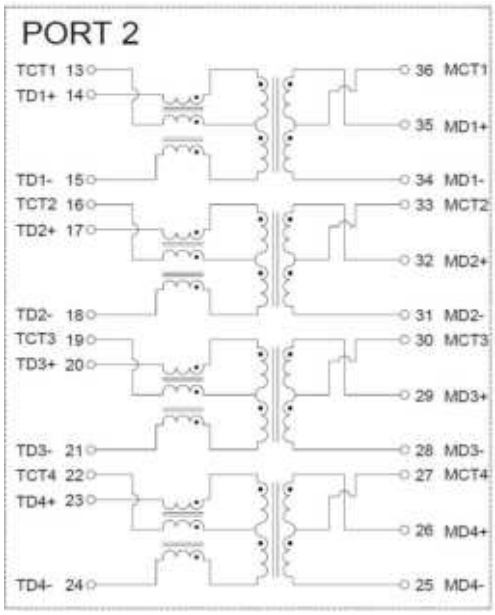
27.8 X 12.2 X 7.2 MM
27.9 X 7.5 X 8.6 MM
RoHS/RoHS II Compliant
MSL Level = 1

Schematics:

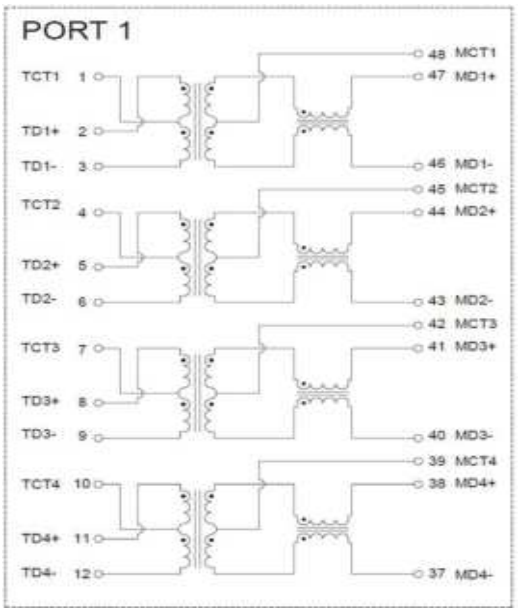
48-Pin

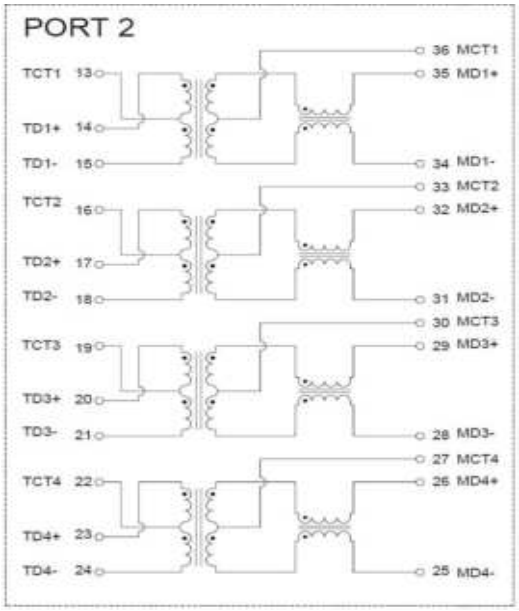
NA1





N11





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Request Samples

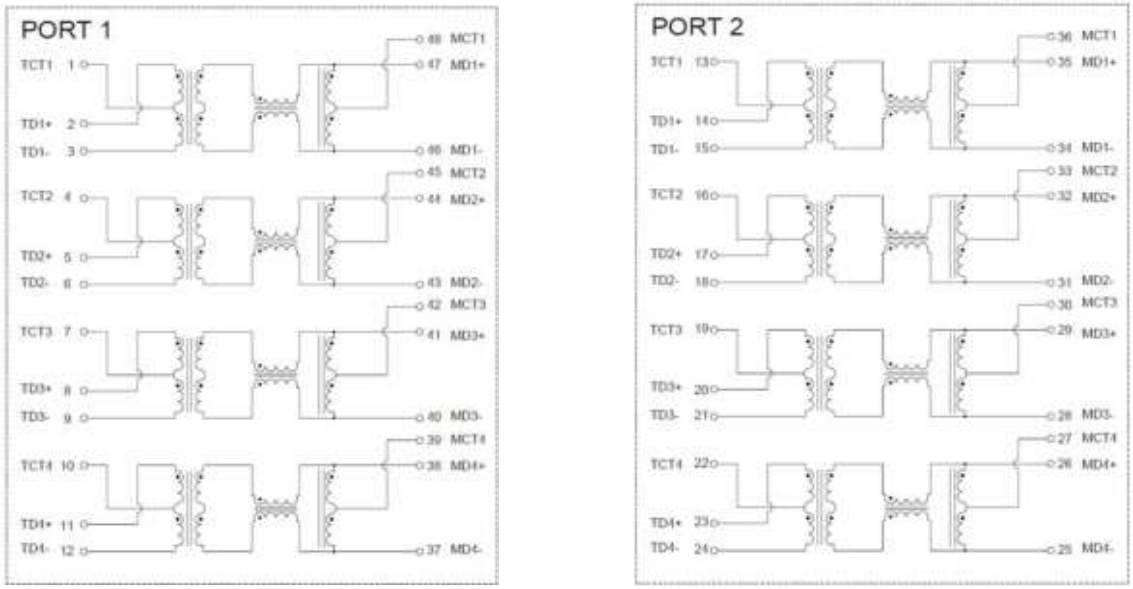
Check Inventory

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Schematics:

48-Pin

N41



Contact Abracon for additional options.

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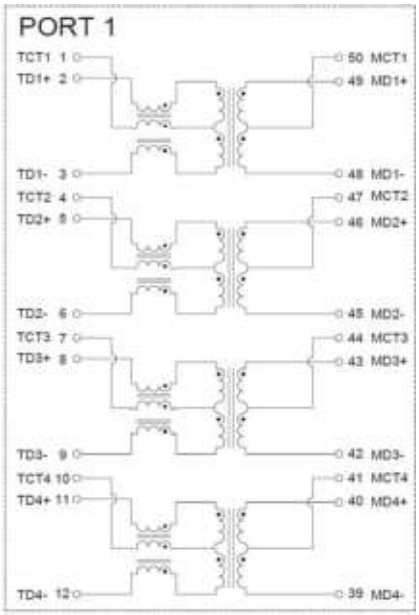
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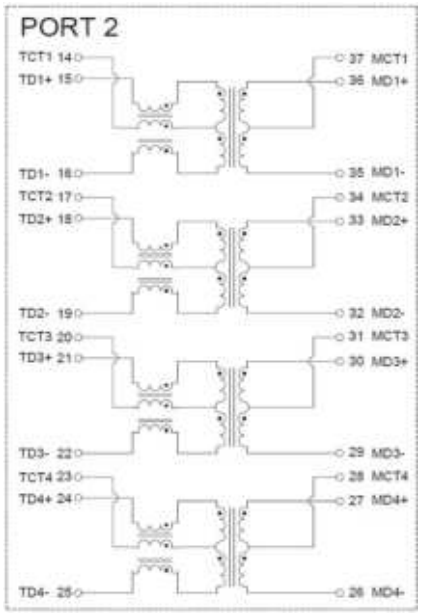
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Schematics:

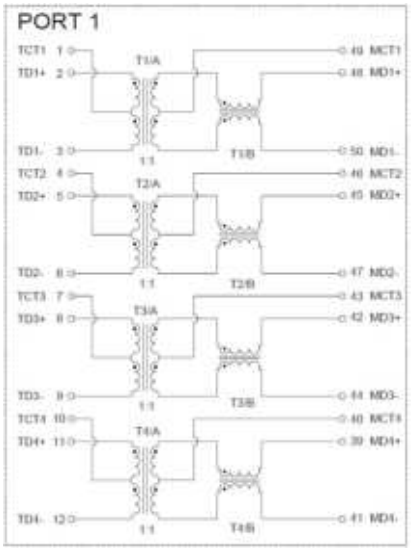
50-Pin

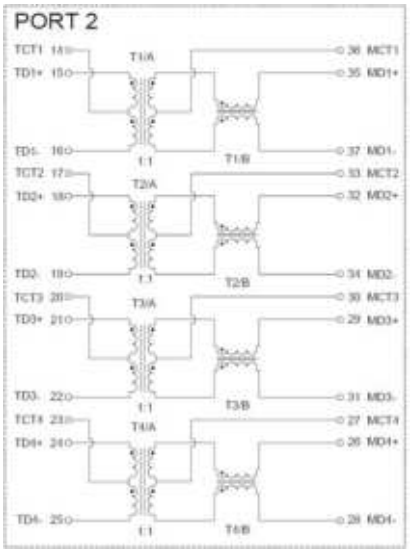
PA1





PA11





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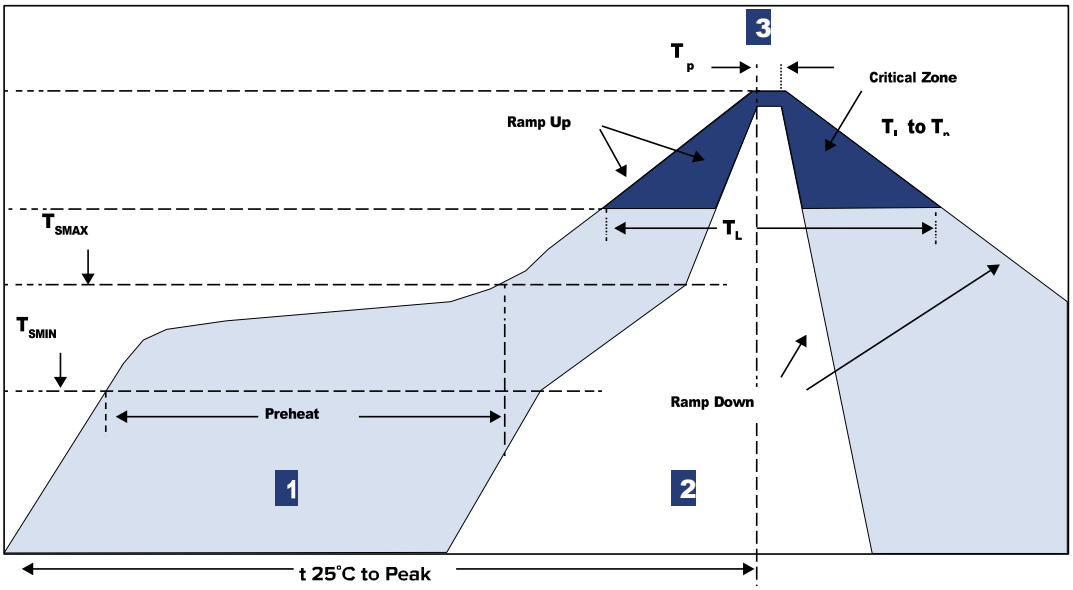


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Reflow Profile



Zone	Description	Temperature	Time
1	Preheat / Soak	T_{SMIN} ~ T_{SMAX} 150°C ~ 200°C	60 ~ 120 sec.
2	Reflow	T_L 217°C	60 ~ 150 sec.
3	Peak heat	T_P 245°C	20 sec. MAX

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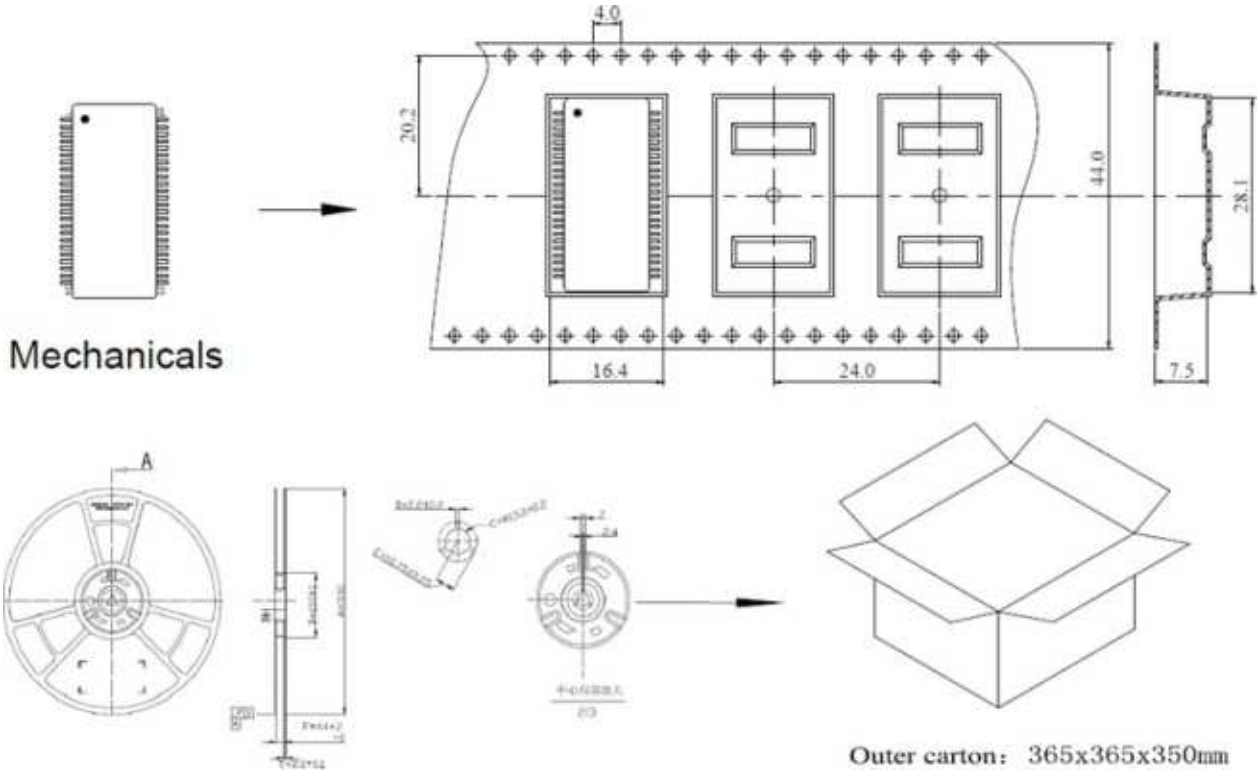
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Packaging

Package size option 6:

Tape and Reel:	300 pcs Pieces per Carton:	1,800 pcs/box T&R per Carton:	6 T&R/box Weight per Carton:
	10.1kg Weight per Piece:	3.2g	



Dimensions: mm

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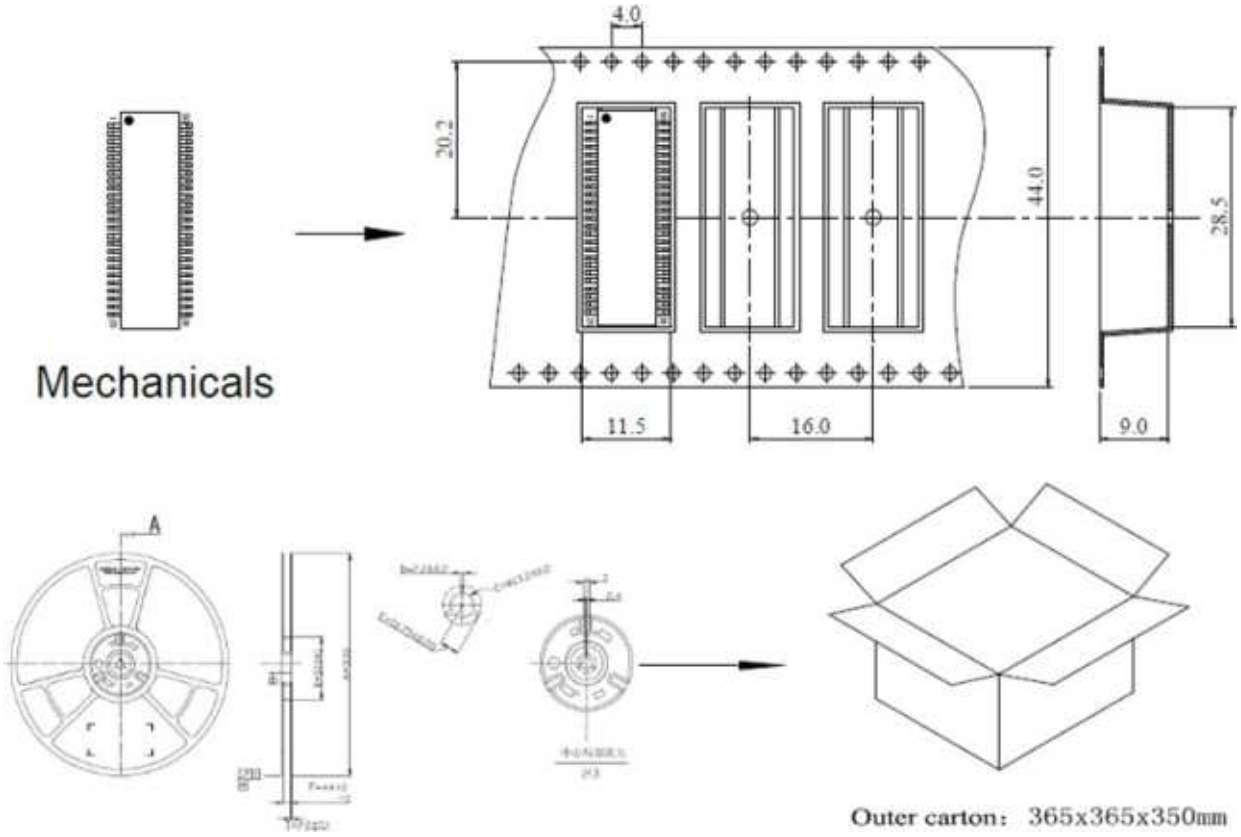
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RoHS/RoHS II Compliant
MSL Level = 1

Packaging

Package size option 7:

Tape and Reel:	400 pcs Pieces per Carton:	2,400 pcs/box T&R per Carton:	6 T&R/box Weight
per Carton:	10.0kg Weight per Piece:	2.2g	



Dimensions: mm

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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