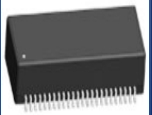


10/100/1000 BASE-T Dual Port SMD LAN Transformer Module



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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RoHS/RoHS II Compliant
MSL Level = 1

Part Identification

ALANS10002-



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

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

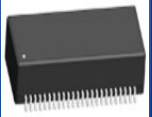
Operating Temp.
E: 0 °C to +70 °C
D: -40 °C to +85 °C
J: -40 °C to +105 °C
K: -40 °C to +125 °C

Packaging
B: Bulk
T: Tape and Reel**

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

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

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



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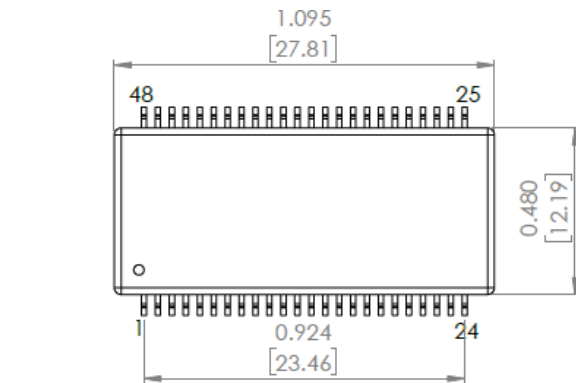
Check Inventory



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

Mechanical Specifications

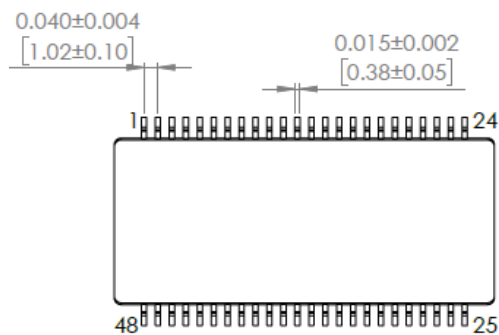
6: 48-pin



TOP VIEW

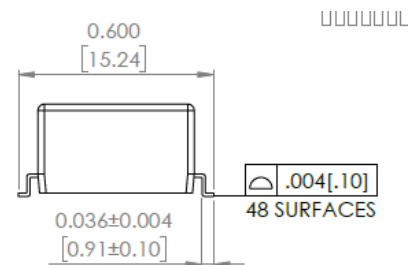
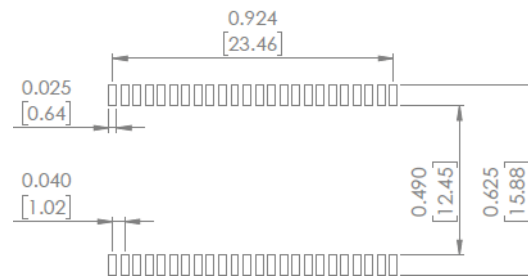


FRONT VIEW



BOTTOM VIEW

RECOMMENDED LAND PATTERN



SIDE VIEW

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



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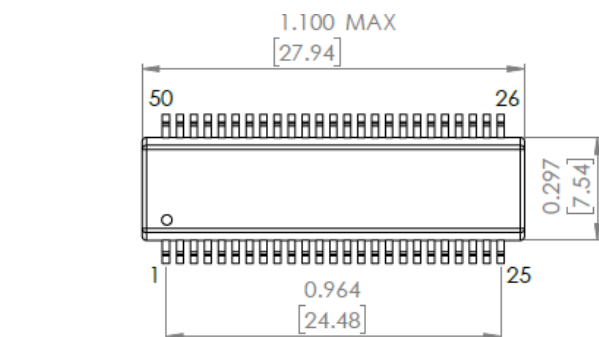
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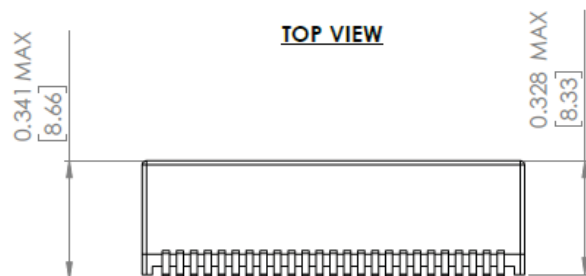
27.8 X 12.2 X 7.2 MM
27.9 X 7.5 X 8.6 MM
RoHS/RoHS II Compliant
MSL Level = 1

Mechanical Specifications

7: 50-pin

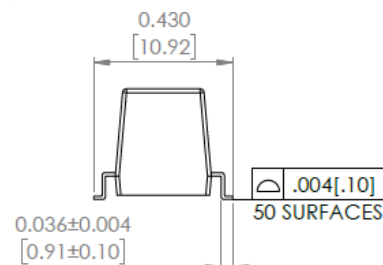
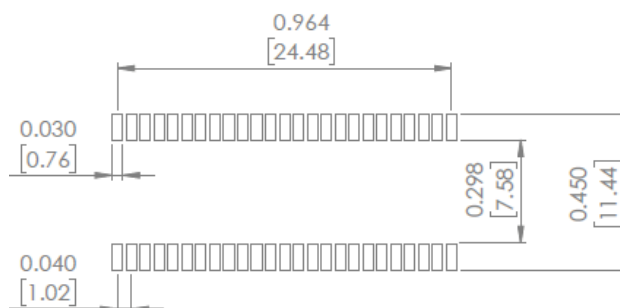


TOP VIEW

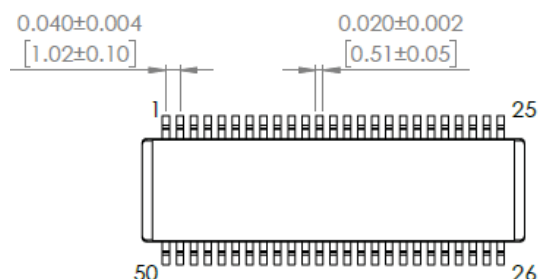


FRONT VIEW

RECOMMENDED LAND PATTERN



SIDE VIEW



BOTTOM VIEW

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



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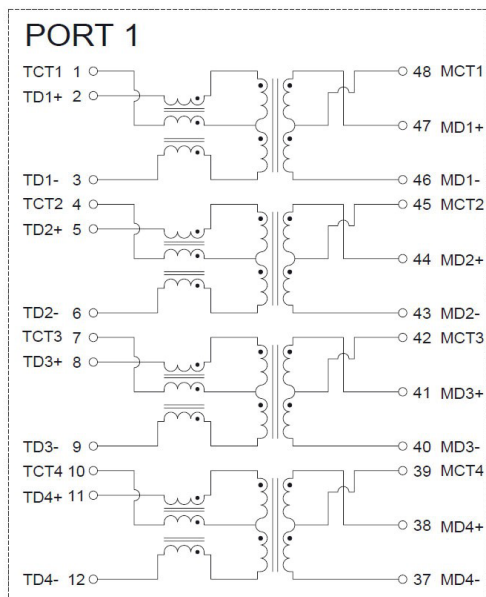


27.8 X 12.2 X 7.2 MM
27.9 X 7.5 X 8.6 MM
RoHS/RoHS II Compliant
MSL Level = 1

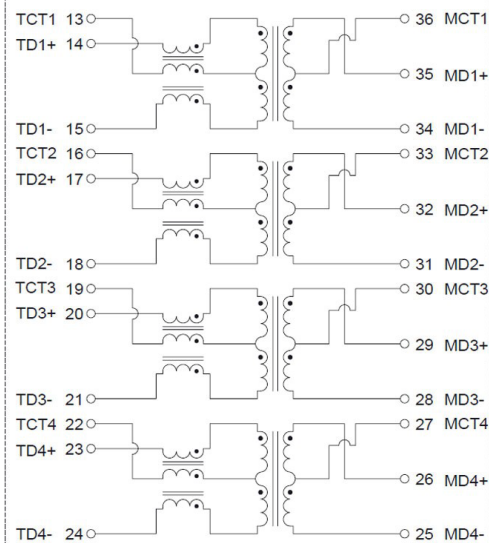
Schematics:

48-Pin

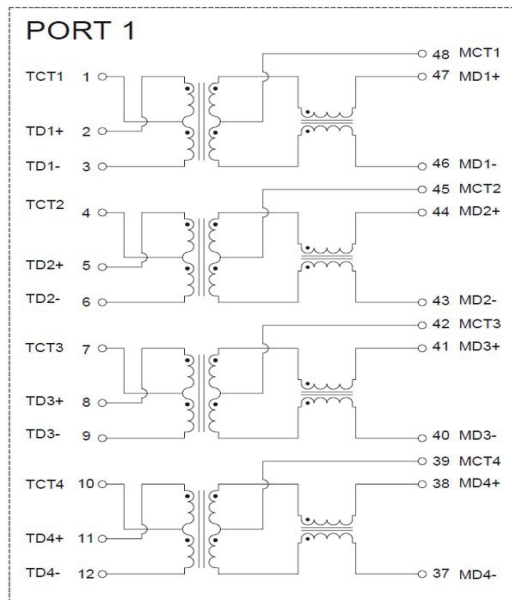
NA1



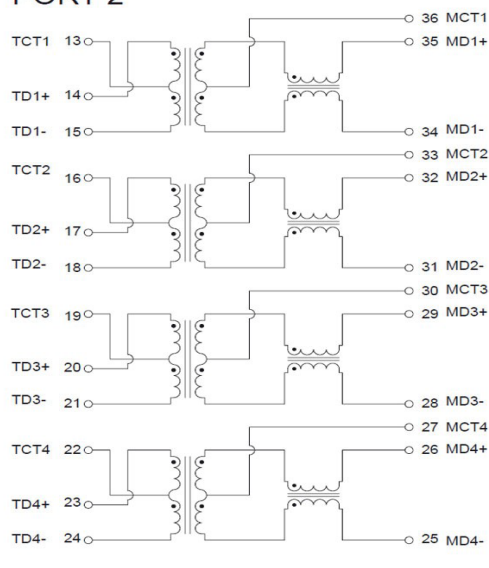
PORT 2



N11



PORT 2



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



ALANS10002

Request Samples



Check Inventory

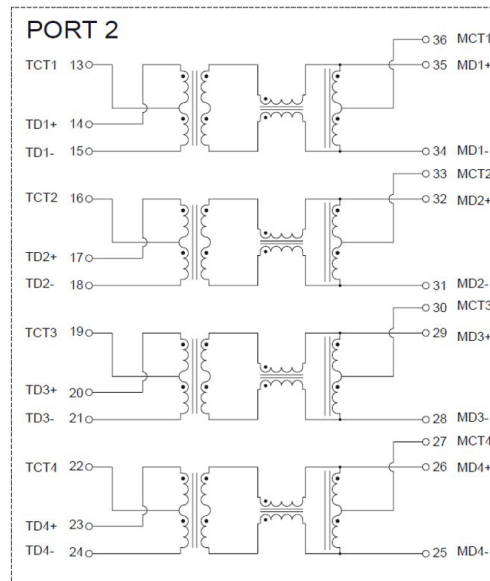
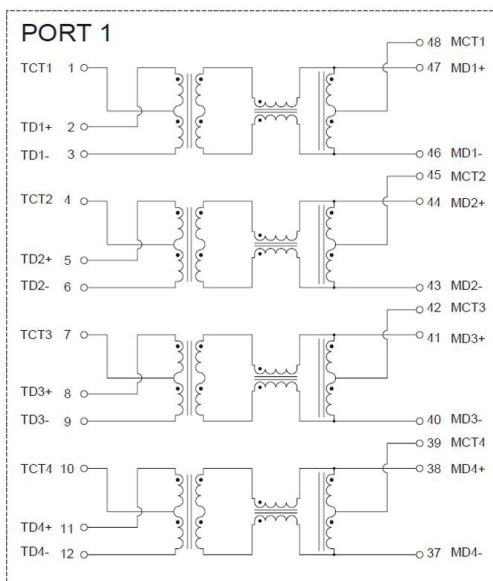


27.8 X 12.2 X 7.2 MM
27.9 X 7.5 X 8.6 MM
RoHS/RoHS II Compliant
MSL Level = 1

Schematics:

48-Pin

N41



Contact Abracon for additional options.

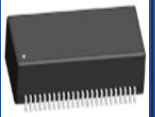


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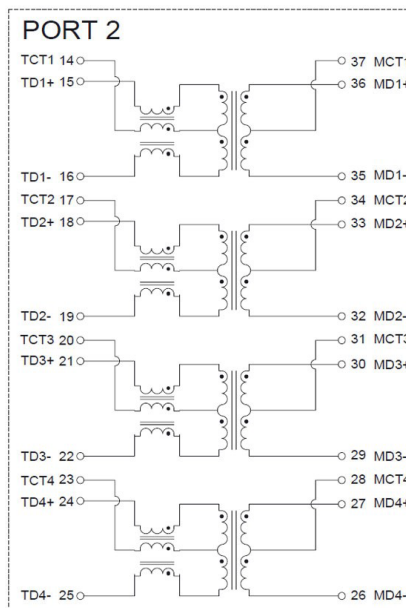
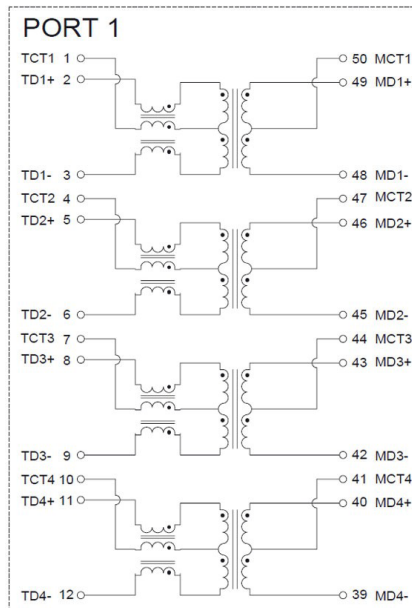


27.8 X 12.2 X 7.2 MM
27.9 X 7.5 X 8.6 MM
RoHS/RoHS II Compliant
MSL Level = 1

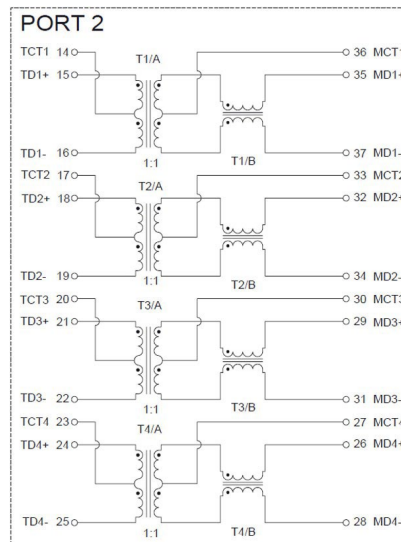
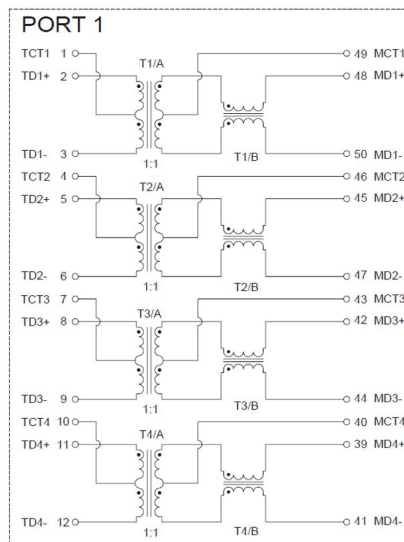
Schematics:

50-Pin

PA1



PA11



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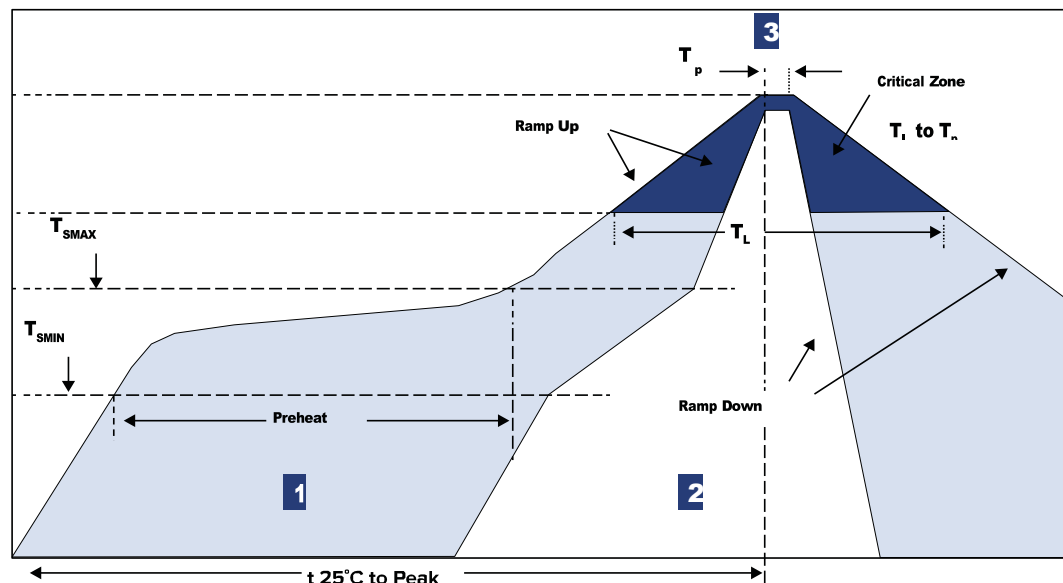


Check Inventory



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

Reflow Profile



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

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

Package size option 6:

1,800 pcs/box T&R per Carton: 6 T&R/box Weight
3.2g



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

Packaging

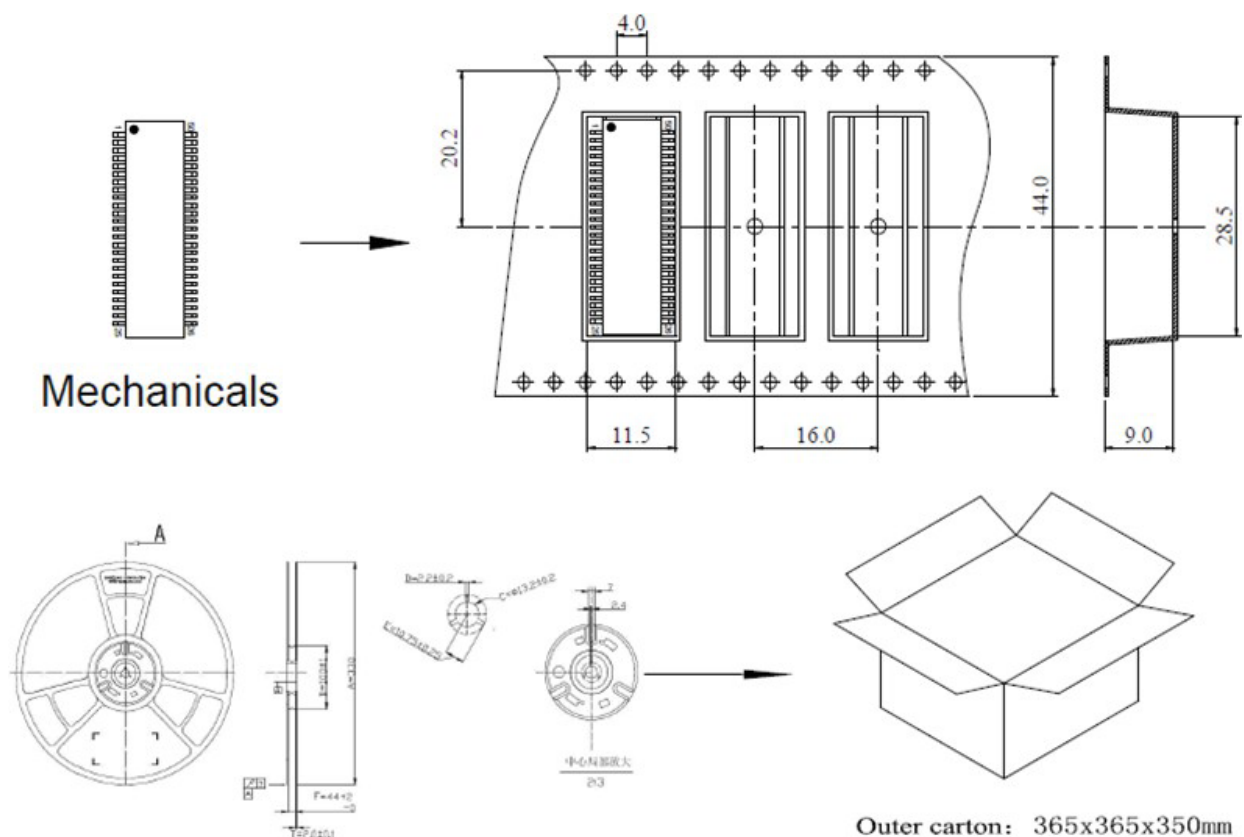
Package size option 7:

Tape and Reel:
per Carton:

400 pcs Pieces per Carton:
10.0kg Weight per Piece:

2,400 pcs/box T&R per Carton: 6 T&R/box Weight
2.2g

Mechanics



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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