



# Networking Communication Components

## RT Series

### LAN Transformer

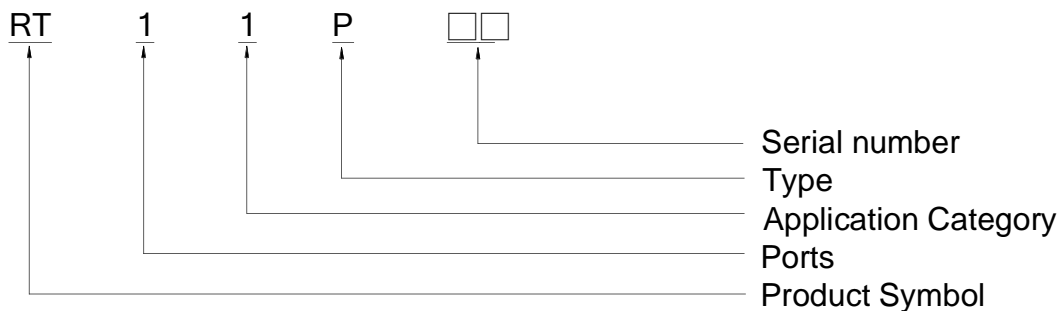
Part number: RT11P03

Part name :10/ 100 Transformer Single Port

### Feature

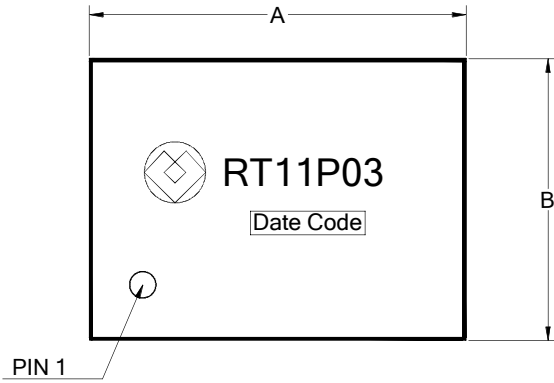
- |   |
|---|
| ● Compliant and peak reflow temperature rating 245°C .  |
| ● Meets IEEE802.3 specification.                        |
| ● Excellent common mode noise suppression.              |
| ● Packaging specification is reel.<br>( RT11P□□: Reel ) |

### Part number code

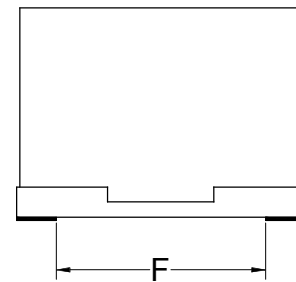
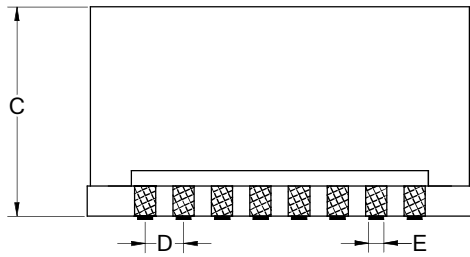
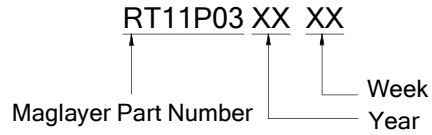


REV.	Description	Date	Drawn	Designed	Approved
A	Specification issued	03.19.2012	Allen.Yu	Allen.Yu	James.Cheng

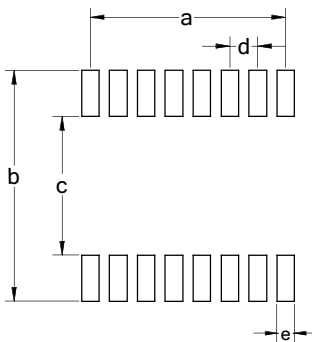
## Mechanical Dimension and Marking



UNIT	mm	inch
A	12.70 +0.254/-0.254	0.50 +0.010/-0.010
B	9.50 +0.254/-0.254	0.374 +0.010/-0.010
C	5.97 +0.254/-0.254	0.235 +0.010/-0.010
D	1.27 +0.254/-0.254	0.050 +0.010/-0.010
E	0.50 +0.127/-0.127	0.020 +0.005/-0.005
F	6.90 +0.254/-0.254	0.272 +0.010/-0.010



## Suggested Land Pattern

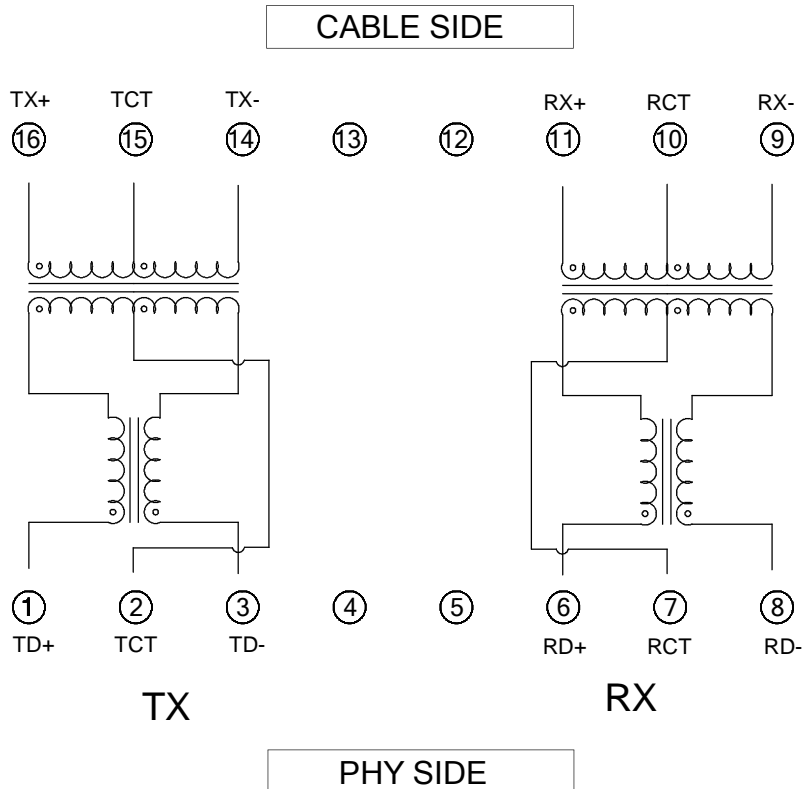


UNIT	mm	inch
a	8.89	0.350
b	10.50	0.413
c	6.30	0.248
d	1.27	0.050
e	0.8	0.030

Drawn	Allen.Yu	Designed	Allen.Yu	Approved	James.Cheng
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## Schematics

RT11P03



N.C. pins: ④ ⑤ ⑫ ⑬

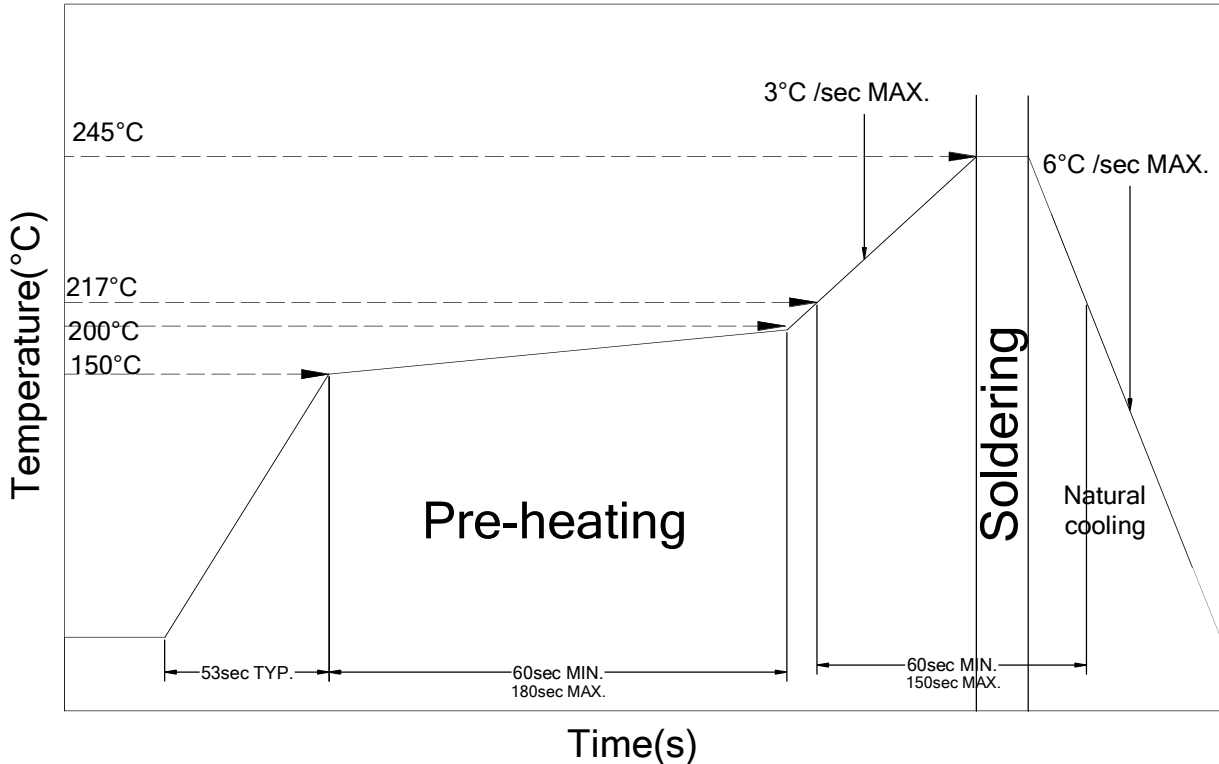
## Electrical Specification @ 25°C, Humidity 65% RH

Inductance @ Phy side(OCL)  
100KHz, 0.1V, 8mA DC Bias  
350uH MIN

Part Number	Turns Ratio		Insertion Loss			Return Loss			DMCR			Crosstalk			Hipot Vrms, Sec
	100KHz		dB MAX			dB MIN			dB MIN			dB MIN			
	TX	RX	1MHz-100MHz			30MHz	60MHz	80MHz	30MHz	50MHz	100MHz	30MHz	60MHz	100MHz	Pri To Sec @60Hz,1mA
RT11P03	1:1±3%	1:1±3%	-1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	1500, 60		

Operating Temperature: -40°C to +85°C.  
Storage Temperature: -25°C to +105°C  
JSDEC Moisture: Level 1.

## Reflow Soldering

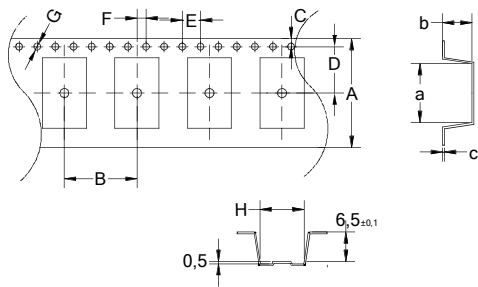


- IR Reflow soldering :  
Preheat at 3°C per second to 217°C and using lead free solder ,  
IR at 245°C for 30seconds Max.
- Rework flow:  
Component must withstand two IR reflow cycles with a cool down  
between cycles
- Temperature is measured at the terminal portion of product  
(Using thermocoupler for measurement).
- This profile is reference data we recommend. Please check in your  
actual process.
- For reliable soldering, the thickness of solder paste screen should  
be over the terminal co-planality.
- The cutted end of terminal has no plating  
(out of subject of solder ability).

## **Packaging Styles**

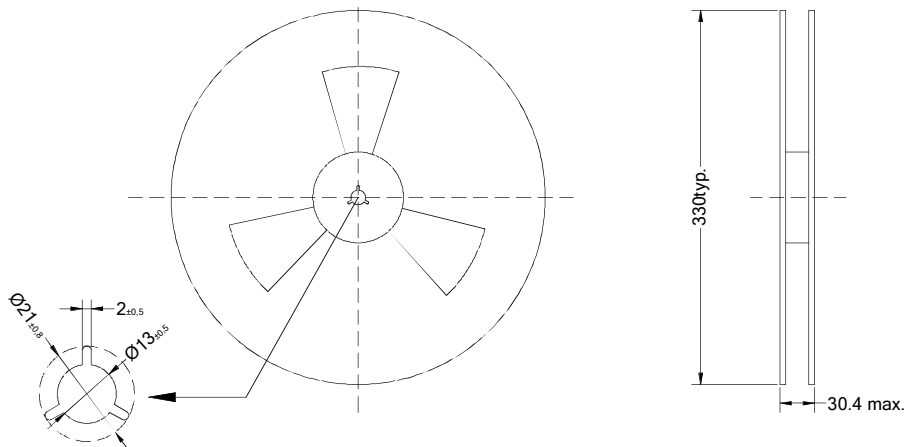
Per 13" reel : 650 pieces

## **Tape Dimensions**



UNIT	mm	UNIT	mm
A	24.00± 0.30	F	2.00± 0.10
B	16.00± 0.10	G	1.50± 0.10
C	1.75± 0.10	H	9.70± 0.10
D	11.50± 0.10	a	13.00± 0.10
E	4.00± 0.10	b	6.50± 0.10
10*E	40.00± 0.20	c	0.40± 0.05

## **Reel Dimensions**



Dimensions in mm

## **Recommended Condition For Long Term Store**

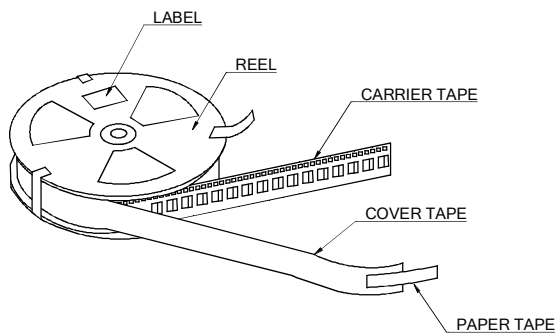
When it stores for a long term, please avoid place of high temperature and high humidity.

Recommend that it uses after the delivery within 1 year.

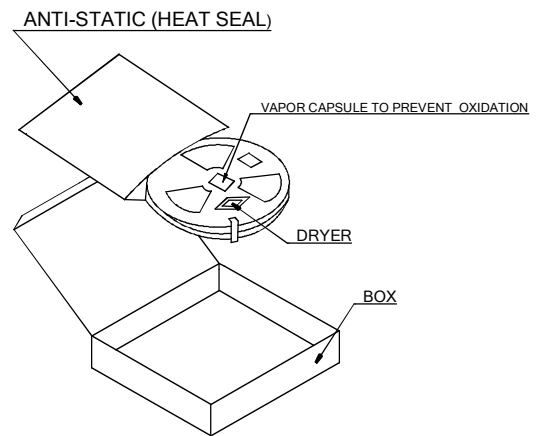
- Temperature range: +5 to +30°C.
- Humidity: 60(%)RH max..
- All dimensions meet EIA-481-C requirement.

## Package Specification

650 pieces / reel



1 reel / BOX



2 BOX / CARTON  
1300 pieces / CARTON

