



Networking Communication Components

RT Series



LAN Transformer

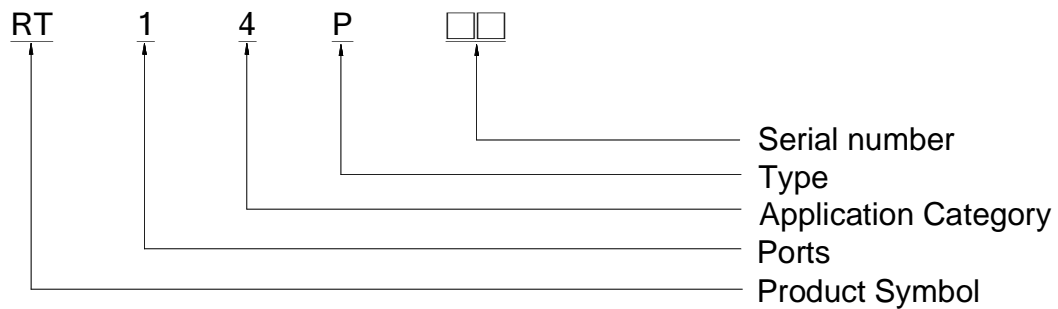
Part number: RT14P03

Part name :Giga Transformer Single Port Support PoE & PoE+

Feature

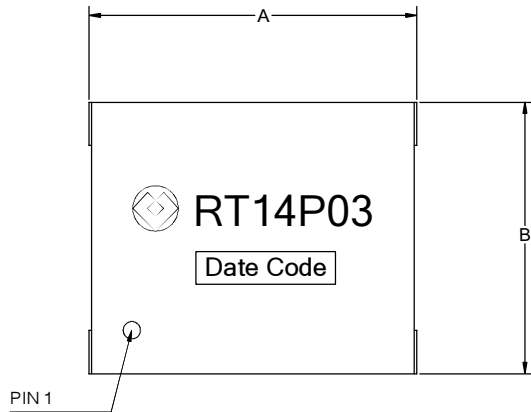
- Compliant and peak reflow temperature rating 245°C .
- Meets IEEE802.3 specification.
- Excellent common mode noise suppression.
- Packaging specification is reel.
(RT14P□□ : Reel)

Part number code

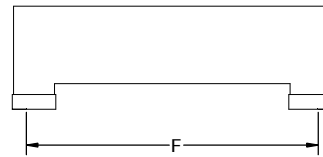
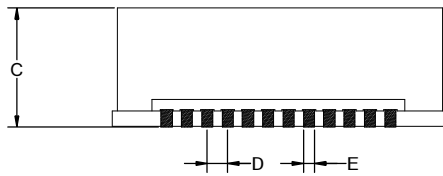
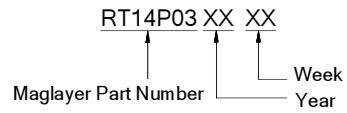


REV.	Description	Date	Drawn	Designed	Approved
A	Specification issued	03.12.2012	Allen.Yu	Allen.Yu	James.Cheng
B	Page 6 & 7 Packaging Specification change : 310 -> 400 reel/piece ; 620 -> 800 reel/carton	08.16.2012	Yuxuan.Xiang	Yuxuan.Xiang	James.Cheng
C	Mechanical Dimension change : unit B : 16.00 mm -> 15.00 mm unit F : 13.40 mm -> 12.40 mm Suggested Land Pattern change : unit c : 12.70 mm -> 11.70 mm	03.19.2013	Yuxuan.Xiang	Yuxuan.Xiang	James.Cheng

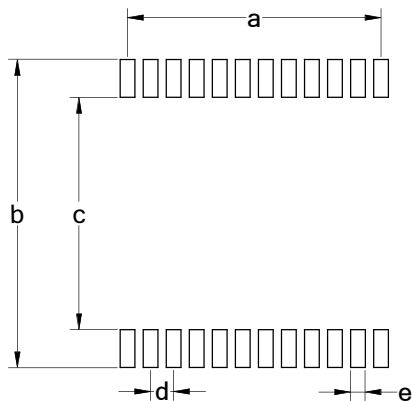
Mechanical Dimension and Marking



UNIT	mm	inch
A	17.50 +0.254/-0.254	0.689 +0.010/-0.010
B	15.00 +0.254/-0.254	0.591 +0.010/-0.010
C	5.40 +0.254/-0.254	0.213 +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	12.40 +0.254/-0.254	0.488 +0.010/-0.010



Suggested Land Pattern

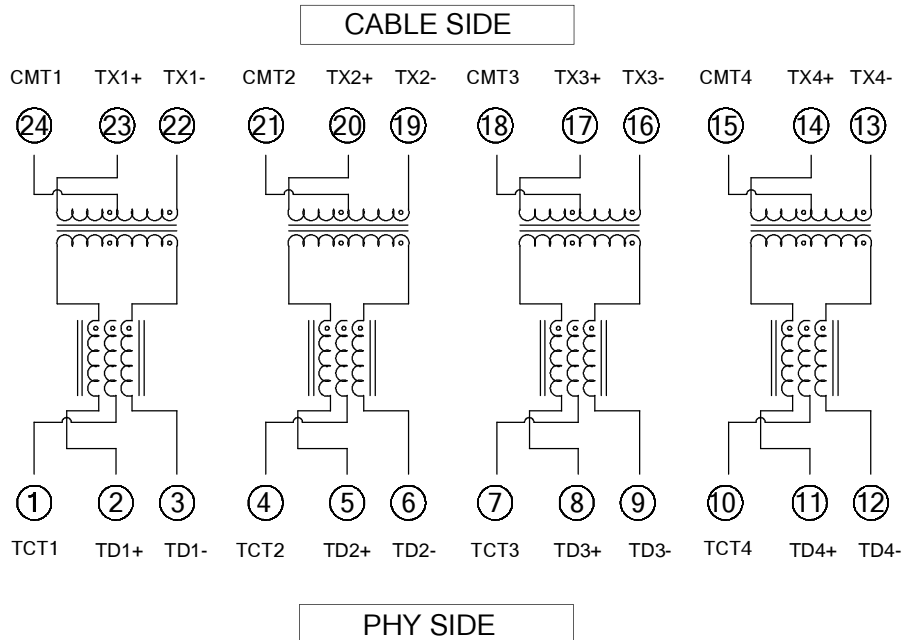


UNIT	mm	inch
a	13.97	0.550
b	16.51	0.650
c	11.70	0.461
d	1.27	0.050
e	0.76	0.030

Drawn	Yuxuan.Xiang	Designed	Yuxuan.Xiang	Approved	James.Cheng
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Schematics

RT14P03



Electrical Specification @ 25°C, Humidity 65% RH

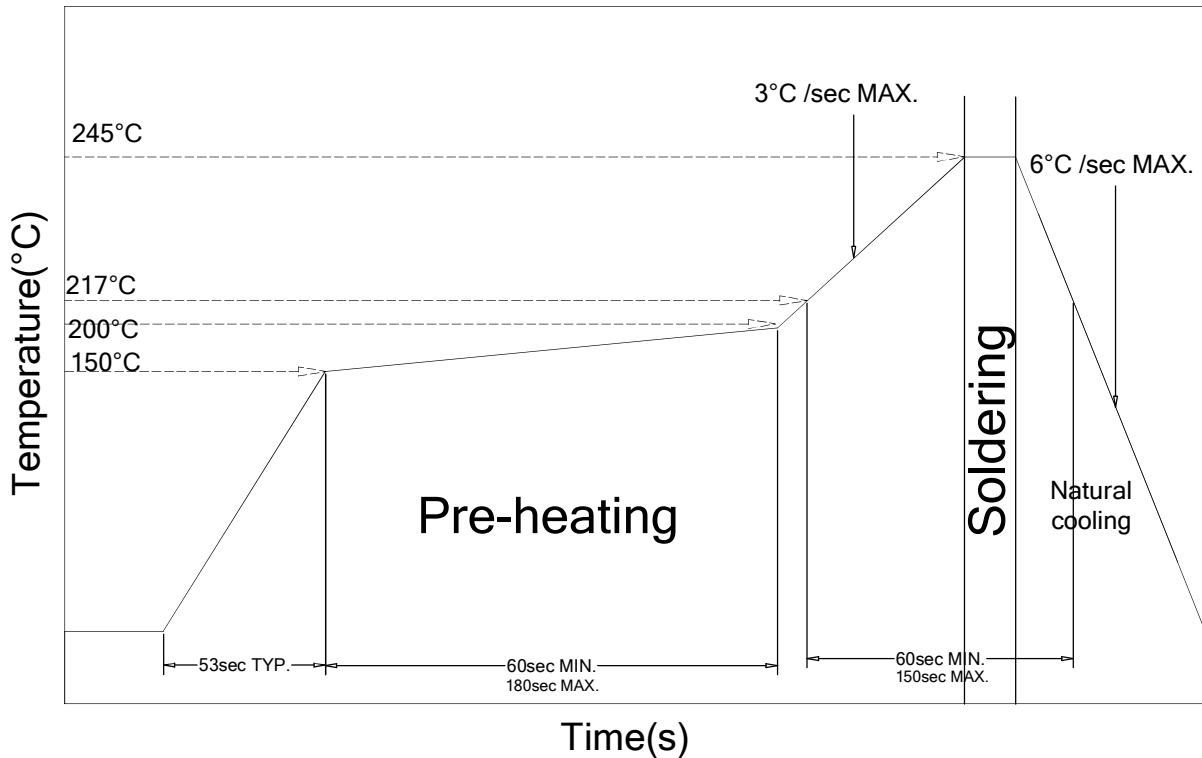
Inductance @ Phy side(OCL)
100KHz, 0.1V, 8mA DC Bias
350uH MIN

Hipot	DC Resistance	DC Current Rating
Vrms, Sec	mOhms, TYP.	MAX
Phy To Cable	1/2 Winding at cable side.	720 mA DC at 57 V
1500, 60	750	

Part Number	Turns Ratio	Insertion Loss		Return Loss				CMRR				Crosstalk					
	100KHz	dB MAX		dB MIN				dB MIN				dB MIN					
	Pri To Sec	1MHz-100MHz	125MHz	1MHz-30MHz	60MHz	80MHz	100MHz	2MHz	30MHz	60MHz	100MHz	150MHz	200MHz	1MHz	30MHz	60MHz	100MHz
RT14P03	1:1±3%	-1.0	-2.0	-18	-14.4	-12	-10	-35	-25	-21.6	-15.4	-10.5	-7.0	-50	-41	-37	-33

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

Reflow Soldering

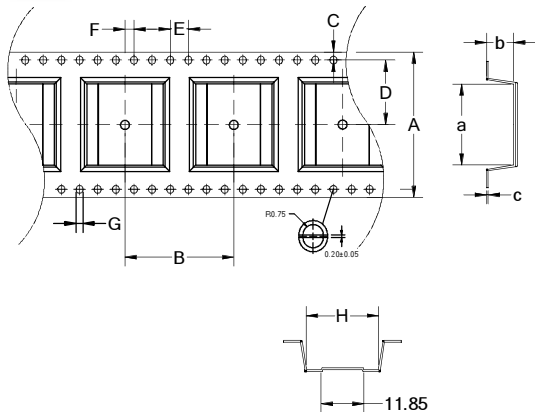


- IR Reflow soldering :
Preheat at 3°C per second to 217°C and using lead free solder ,
IR at 245°C for 30seconds Max.
- Rework flow:
Component must withstand two IR reflow cycles with a cool down
between cycles
- Temperature is measured at the terminal portion of product
(Using thermocoupler for measurement).
- 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

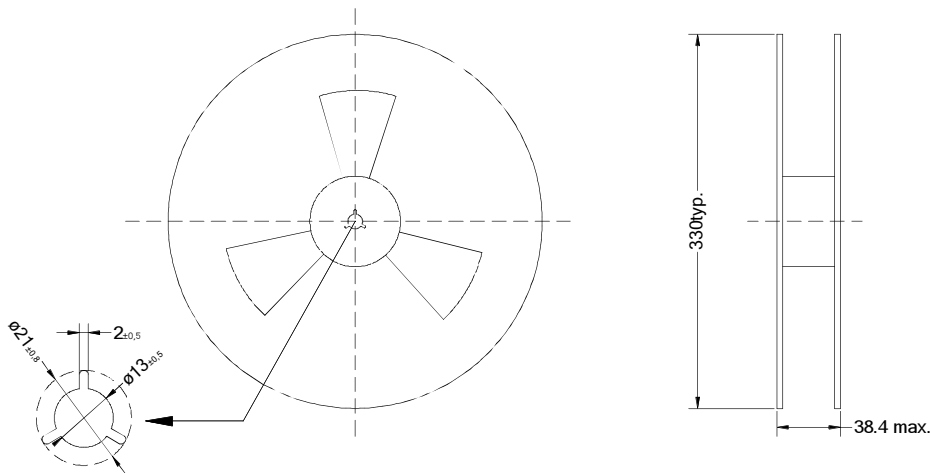
Per 13" reel: 400 pieces

Tape Dimensions



UNIT	mm	UNIT	mm
A	32.00± 0.30	F	2.00± 0.10
B	24.00± 0.10	G	1.50± 0.02
C	1.75± 0.10	H	16.85± 0.10
D	14.20± 0.10	a	17.85± 0.10
E	4.00± 0.10	b	7.50± 0.10
10*E	40.00± 0.20	c	0.40± 0.05

Reel Dimensions



Dimensions in mm

Recommended Condition For Long Term Store

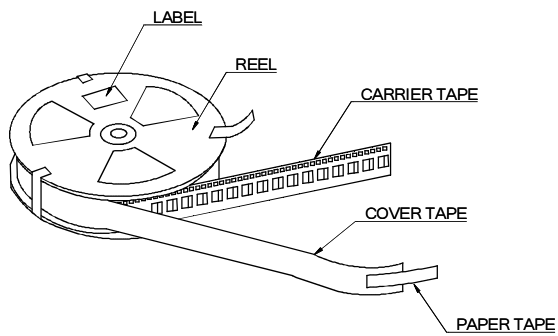
When it stores for a long term, please avoid place of high temperature and high humidity.

Recommend that it uses after the delivery within 1 year.

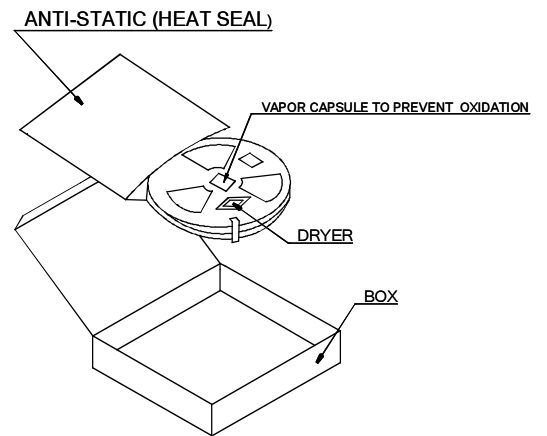
- Temperature range: +5 to +30°C.
- Humidity: 60(%)RH max..
- All dimensions meet EIA-481-C requirement.

Package Specification

400 pieces / reel



1 reel / BOX



2 BOX / CARTON
800 pieces / CARTON

