



# Networking Communication Components

## RT Series

### **LAN Transformer**

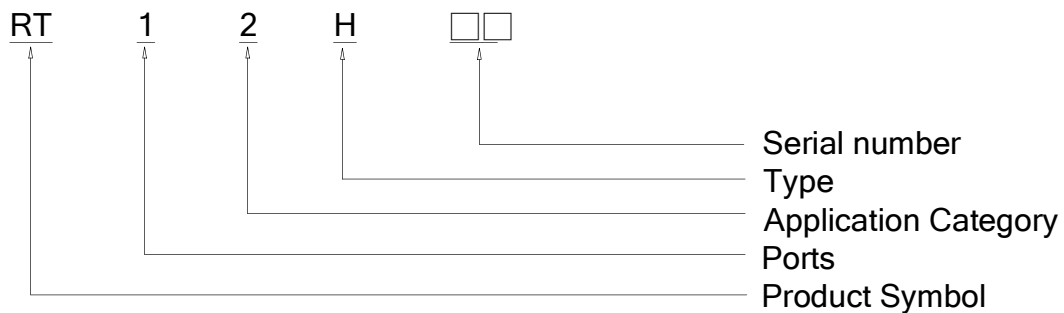
Part number: RT12H04

Part name :Giga Transformer Single Port

### **Feature**

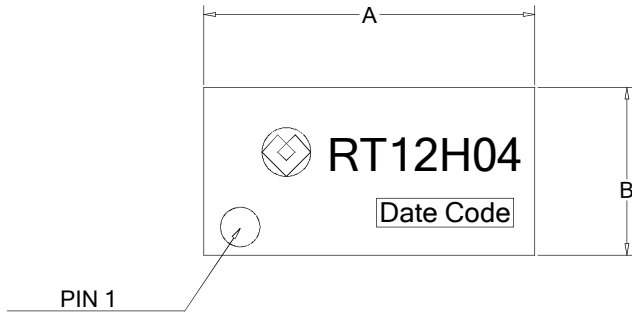
- Compliant and peak reflow temperature rating 255°C .
- Meets IEEE802.3 specification.
- Excellent common mode noise suppression.
- Packaging specification is tube.  
(RT12H□□: Tube)

### **Part number code**

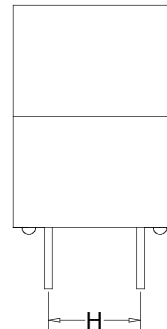
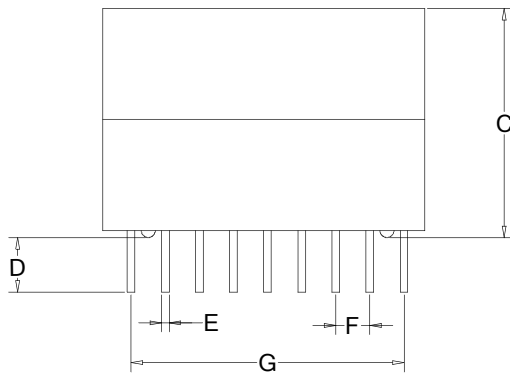
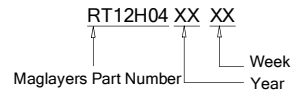




# Mechanical Dimension and Marking

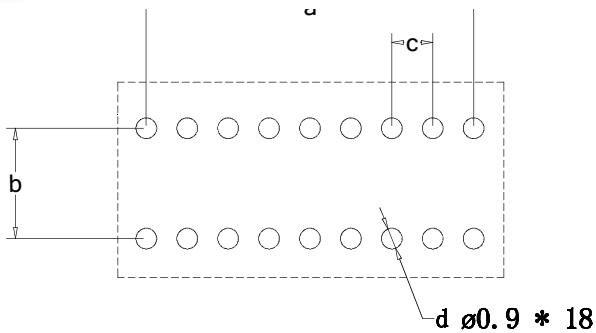


UNIT	mm	inch
A	16.80 +0.254/-0.254	0.661 +0.010/-0.010
B	8.50 +0.254/-0.254	0.335 +0.010/-0.010
C	11.60 +0.254/-0.254	0.457 +0.010/-0.010
D	3.20 +0.254/-0.254	0.126 +0.010/-0.010
E	0.40 +0.127/-0.127	0.016 +0.005/-0.005
F	1.78 +0.127/-0.127	0.070 +0.005/-0.005
G	14.24 +0.254/-0.254	0.561 +0.010/-0.010
H	4.80 +0.254/-0.254	0.189 +0.010/-0.010



Suggested PWR Layout

## Suggested Land Pattern



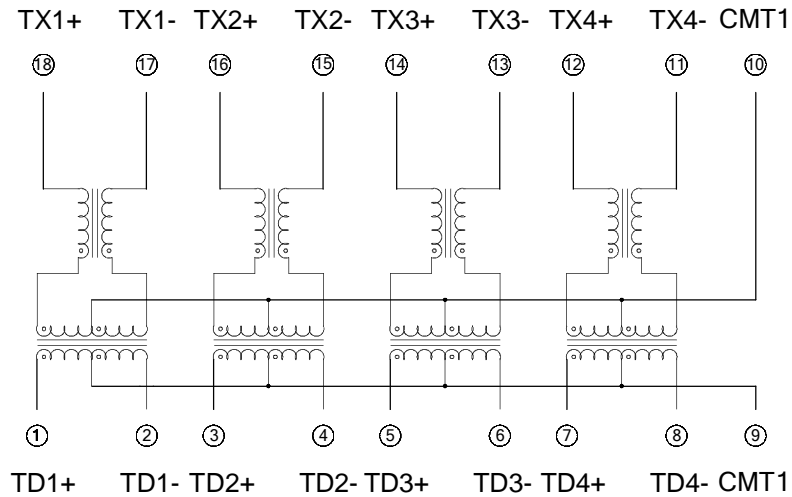
UNIT	mm	inch
a	14.24	0.561
b	4.80	0.189
c	1.78	0.070
d	ø0.90	ø0.035

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

RT12H04

CABLE SIDE



PHY SIDE

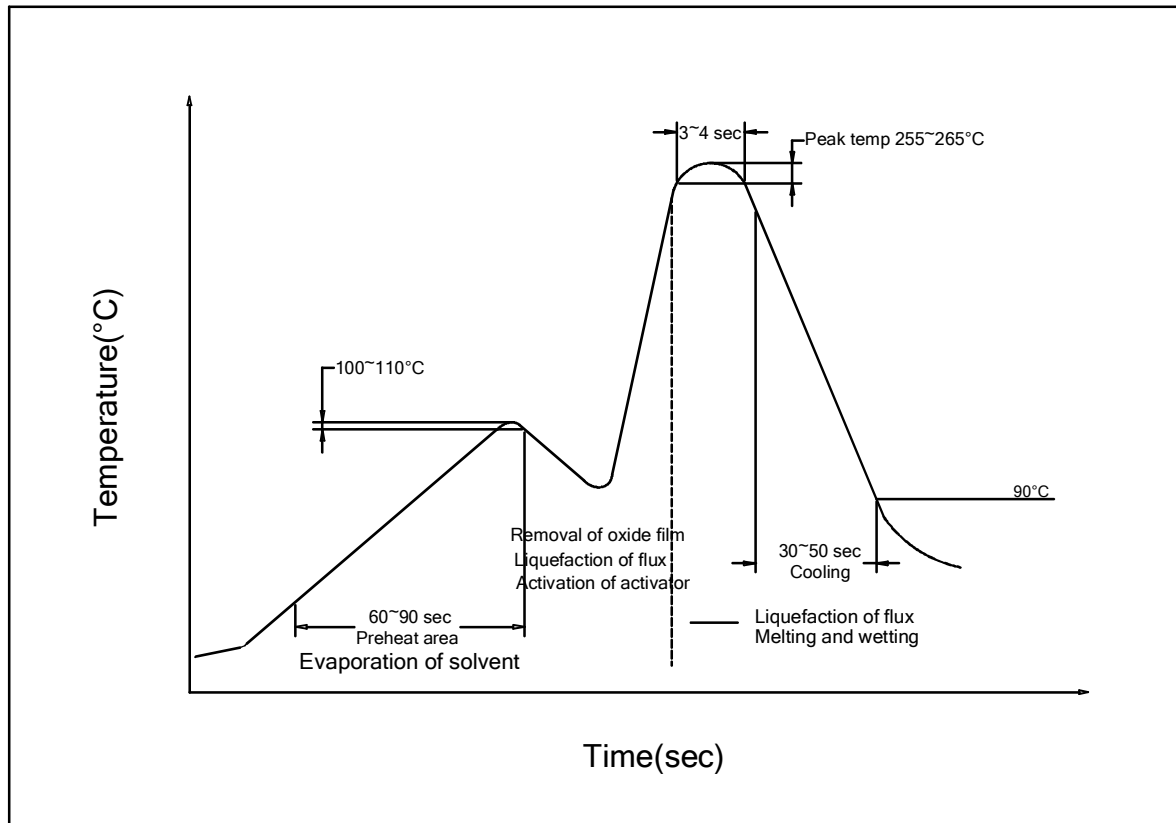
## Electrical Specification @ 25°C, Humidity 65% RH

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

Part Number	Turns Ratio	Insertion Loss	Return Loss					CMRR			Crosstalk			Hipot
	100KHz	dB MAX	dB MIN					dB MIN			dB MIN			Vrms, Sec
	± 3%	1MHz-100MHz	1MHz-30MHz	40MHz-50MHz	60MHz-80MHz	100MHz	30MHz	60MHz	125MHz	30MHz	60MHz	100MHz	Pri To Sec	
RT12H04	1:1	-1.0	-18	-14	-13	-12	-10	-43	-37	-25	-42	-35	-32	1500, 60

Operating Temperature: 0°C to +70°C.  
Storage Temperature: -25°C to +105°C  
JSDEC Moisture: Level 1.

## Wave Soldering



- Tip Temperature :265°C MAX.
- Tip Temperature Time: 4sec MAX.