



Networking Communication Components

RT Series

LAN Transformer

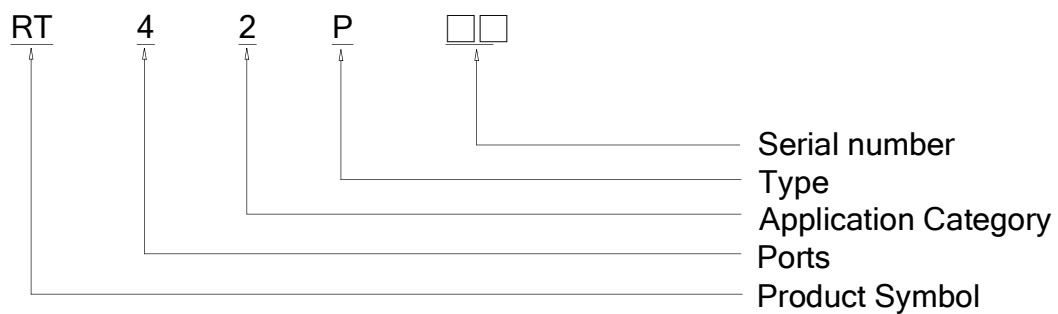
Part number: RT42P01

Part name :Giga Transformer Four Port

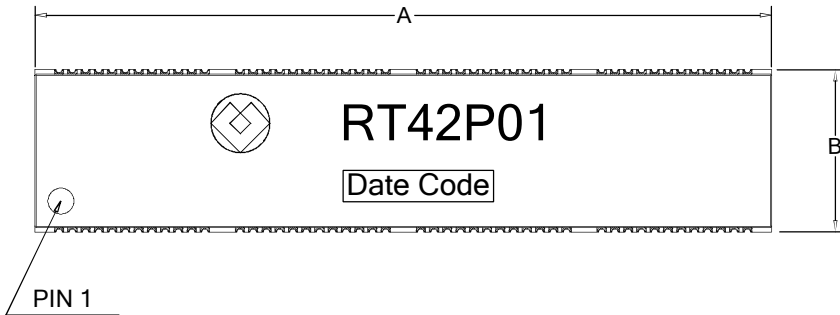
Feature

- Compliant and peak reflow temperature rating 245°C .
- Meets IEEE802.3 specification.
- Excellent common mode noise suppression.
- Packaging specification is reel.
(RT42P□□: Reel)

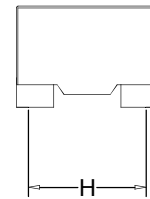
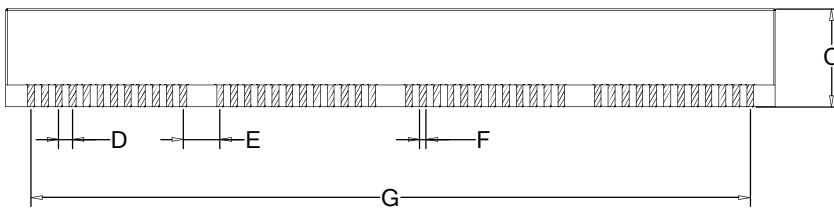
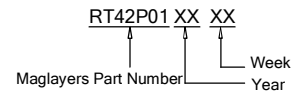
Part number code



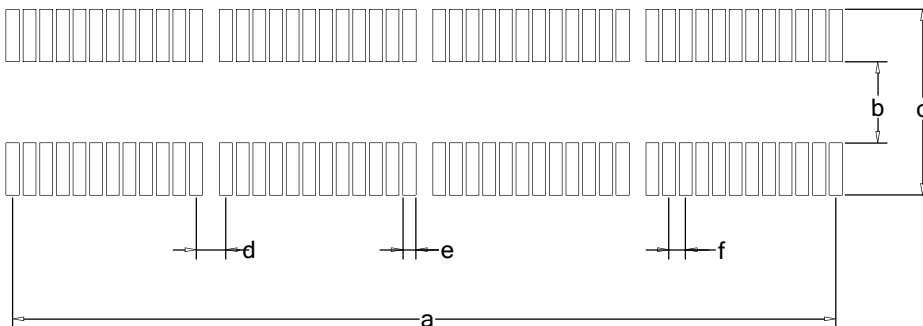
Mechanical Dimension and Marking



UNIT	mm	inch
A	57.70 +0.254/-0.254	2.272 +0.010/-0.010
B	10.00 +0.254/-0.254	0.394 +0.010/-0.010
C	7.25 +0.254/-0.254	0.285 +0.010/-0.010
D	1.02 +0.127/-0.127	0.040 +0.005/-0.005
E	2.70 +0.254/-0.254	0.106 +0.010/-0.010
F	0.50 +0.127/-0.127	0.020 +0.005/-0.005
G	52.98 +0.254/-0.254	2.086 +0.010/-0.010
H	7.60 +0.254/-0.254	0.299 +0.010/-0.010



Suggested Land Pattern



UNIT	mm	inch
a	52.98	2.086
b	8.20	0.323
c	11.60	0.457
d	2.70	0.106
e	0.65	0.026
f	1.02	0.040

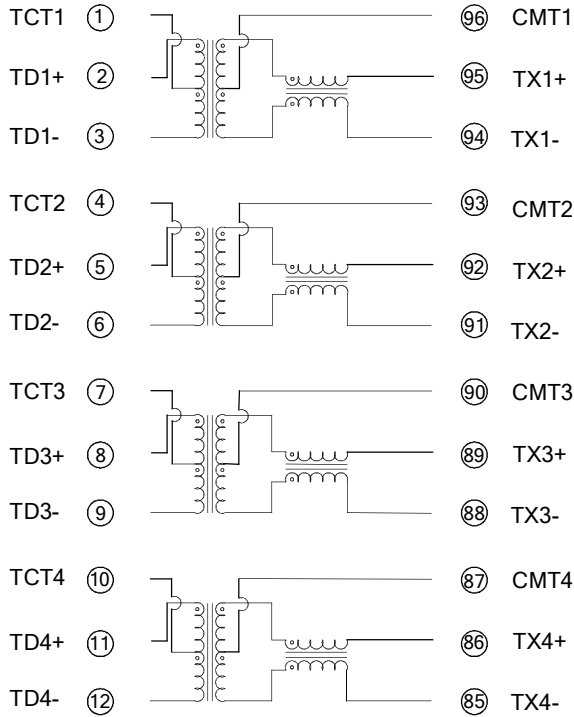
Drawn	Yuxuan.Xiang	Designed	Yuxuan.Xiang	Approved	James.Cheng
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Schematics

RT42P01

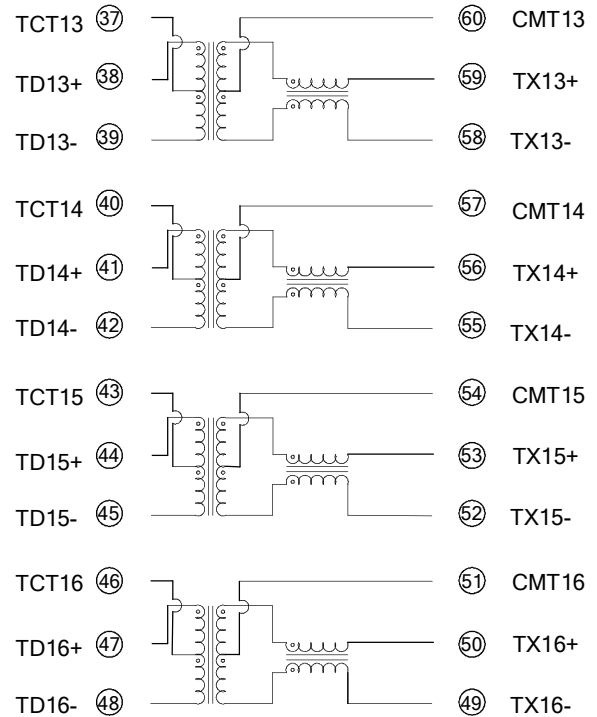
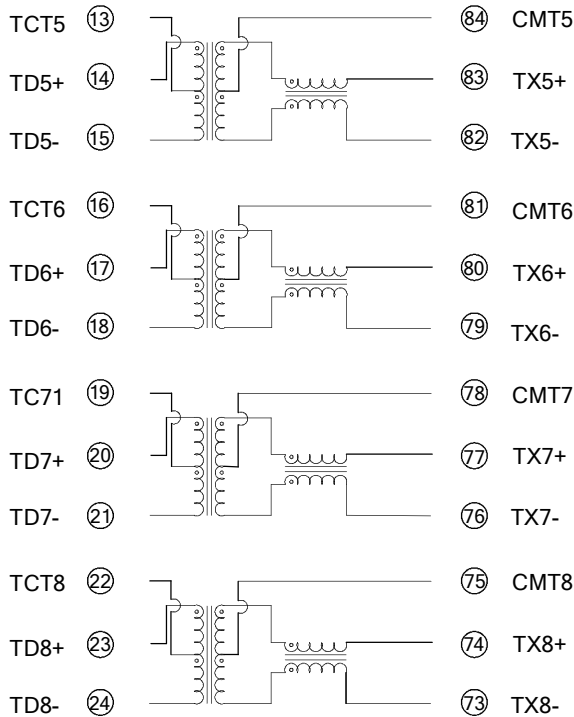
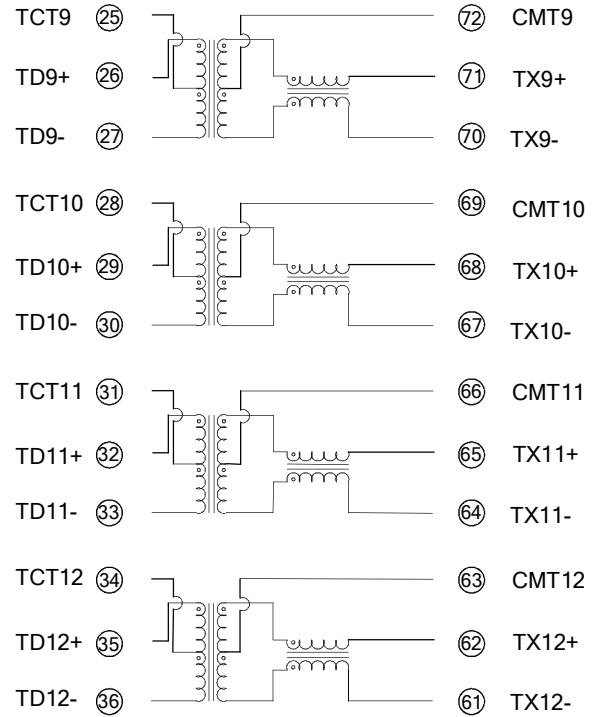
PHY SIDE

CABLE SIDE



PHY SIDE

CABLE SIDE





Electrical Specification @ 25°C, Humidity 65% RH

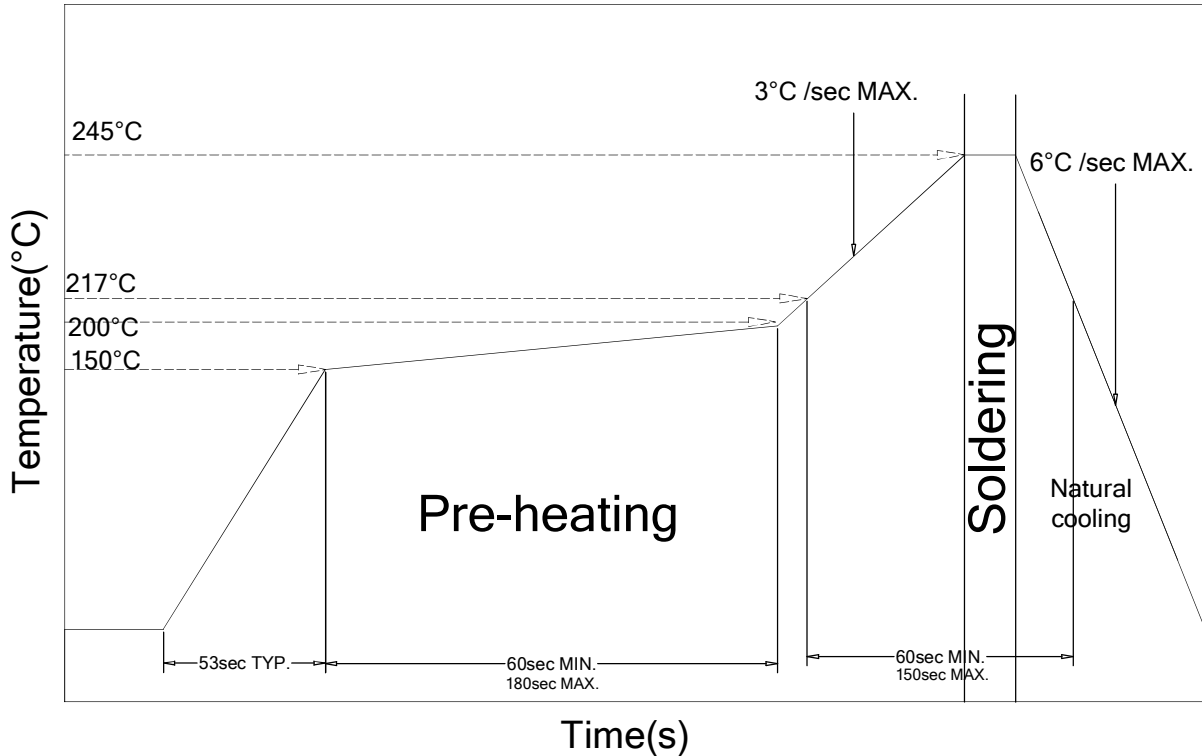
Inductance @ Phy side(OCL)
100KHz, 0.1V, 8mA DC Bias
350uH MIN

Part Number	Turns Ratio	Insertion Loss	Return Loss					DMCR			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	100MHz	30MHz	60MHz	100MHz	Pri To Sec	
RT42P01	1:1	-1.0	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-40	-35	-33	1500, 60

Operating Temperature: 0°C to +70°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).