



# Networking Communication Components

## RT Series

### **LAN Transformer**

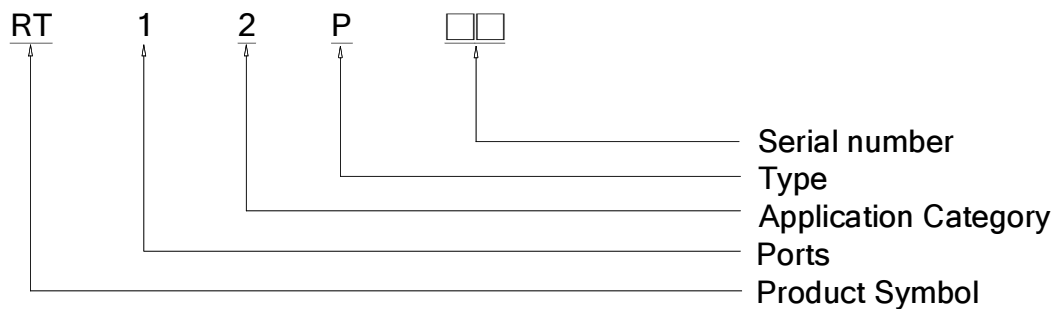
Part number: RT12P15

Part name :Giga Transformer Single Port

### **Feature**

- Compliant and peak reflow temperature rating 245°C .
- Meets IEEE802.3 specification.
- Packaging specification is reel.  
( RT12P□□ : Reel )

### **Part number code**





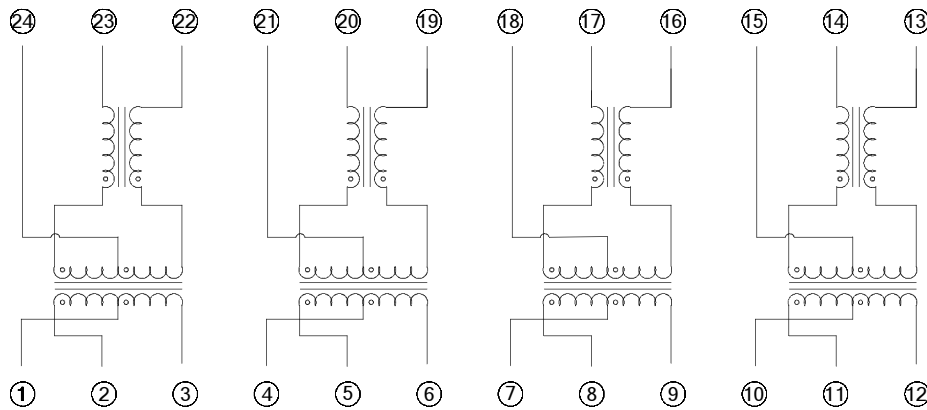


## Schematics

RT12P15

### CABLE SIDE

CMT1 TX1+ TX1- CMT2 TX2+ TX2- CMT3 TX3+ TX3- CMT4 TX4+ TX4-



TCT1 TD1+ TD1- TCT2 TD2+ TD2- TCT3 TD3+ TD3- TCT4 TD4+ TD4-

### PHY SIDE

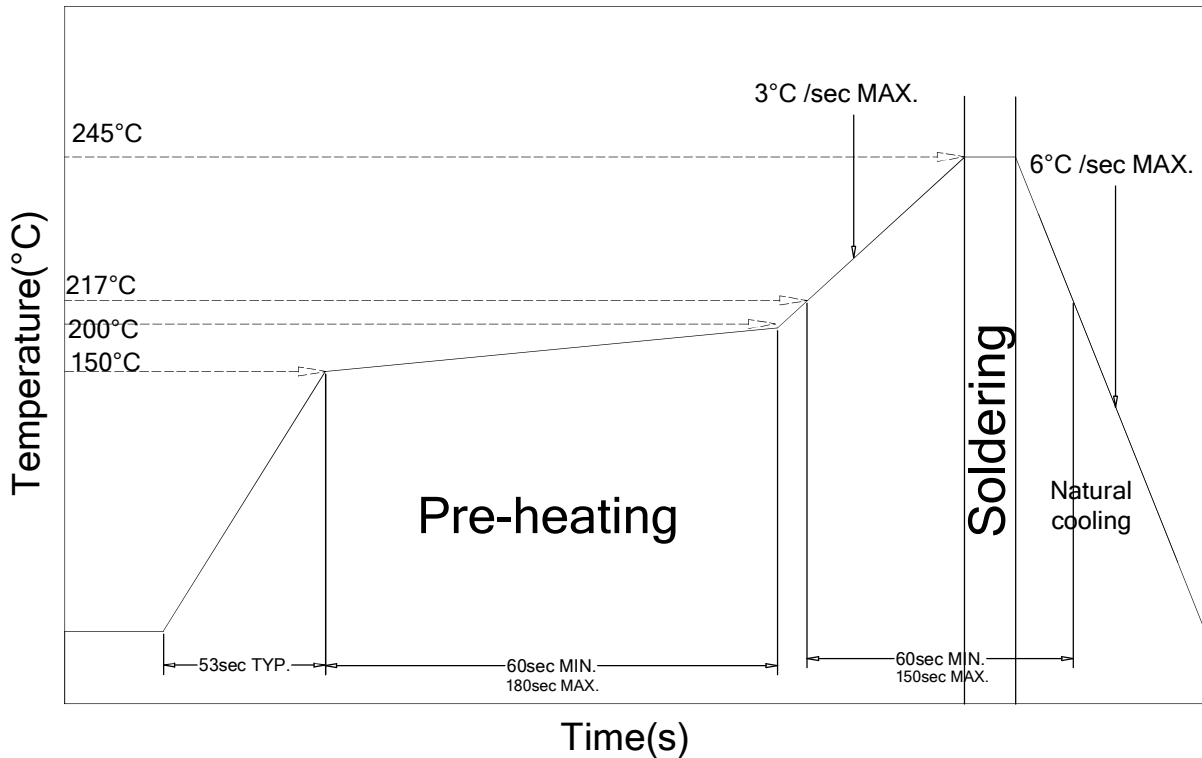
## Electrical Specification @ 25°C, Humidity 65% RH

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

Part Number	Turns Ratio	Insertion Loss	Return Loss					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	
RT12P15	1:1	-1.0	-18	-14	-13	-12	-10	-43	-37	-33	-42	-35	-32	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).