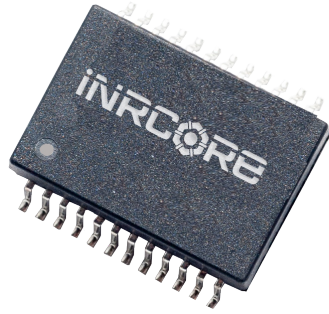


# 10G BASE-T PoE (++) TRANSFORMER MODULE



Ruggedized



- Compliant with IEEE 802.3ab for 1000 Base-T
- 120µH OCL with 27mA DC bias, at 100KHz 100mV
- Current Rating: 900mA Max per pair
- Storage Temperature: -55°C to +125°C
- Operating Temperature:
  - 10GB-6013: -40°C to +85°C
  - 10GB-6013X: -55°C to +125°C
- Terminal Finish: Sn/Pb (Pure tin for RoHS version)
- Moisture Sensitivity Level: 3

## Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)			Return Loss (dB MIN)					Crosstalk (dB MIN)				DM to CM Rejection (dB MIN)			DWV @5s (Vrms MIN)
	100 KHz	1-300 MHz	400-500 MHz	1 MHz	100 MHz	300 MHz	400 MHz	500 MHz	1 MHz	100 MHz	400 MHz	500 MHz	1 MHz	250 MHz	500 MHz	
10GB-6013	3	1.20	3	22	18	12	10	8	40	37	30	25	40	30	22	1500
10GB-6013X	3	1.20	3	22	18	12	10	8	40	37	30	25	40	30	22	1500

### NOTES:

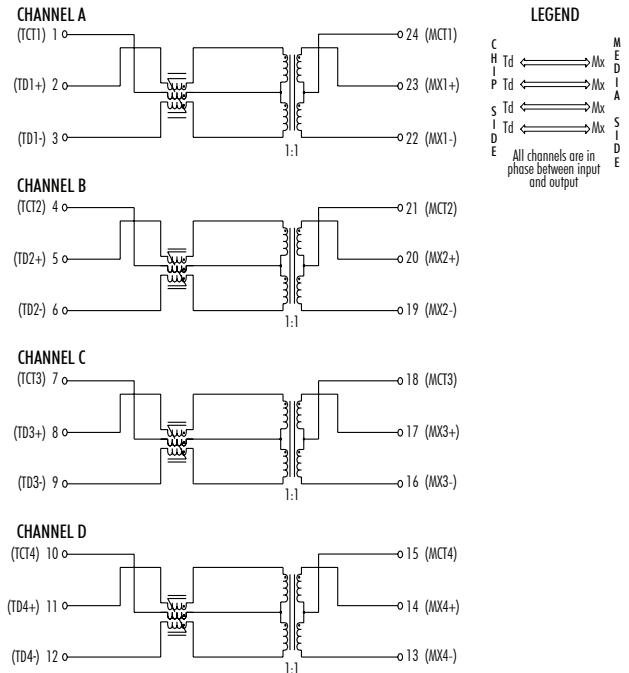
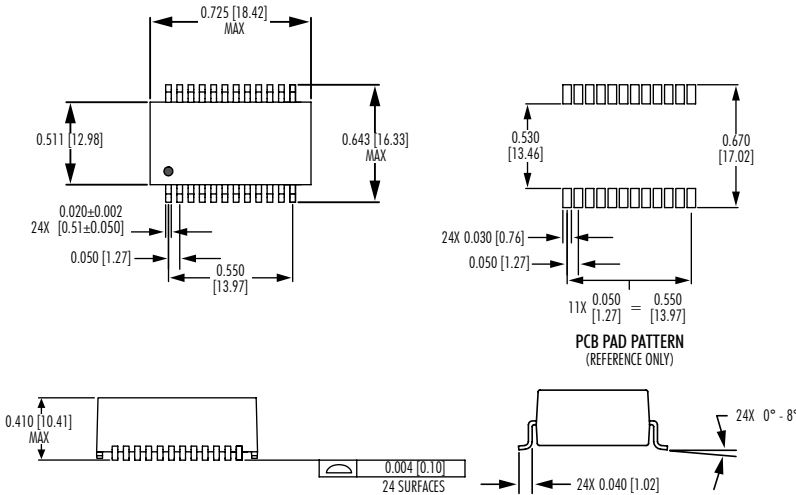
- Add suffix "NL" for RoHS compliant version; i.e. 10GB-6013 becomes 10GB-6013NL. NL parts have 100% SN Lead Finish (MSL:4)
- For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 10GB-6013NLT.

### Mechanicals

### Electrical Schematics

#### 10GB-6013 / 10GB-6013X

Dimensions: inch [mm]  
Tolerance (unless otherwise specified): ±0.010 [0.25]



# 10G BASE-T PoE (++) TRANSFORMER MODULE

Ruggedized



## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



$T_{SMIN}$ (°C)	$T_{SMAX}$ (°C)	$T_L$ (°C)	$T_P$ (°C MAX)	$t_s$ (s)	$t_L$ (s)	$t_p$ (s MAX)	Ramp-up rate ( $T_L$ to $T_p$ )	Ramp-down rate ( $T_p$ to $T_L$ )	Time 25°C to peak temperature (s MAX)
100	150	183	235	60 - 120	60 - 150	20	3°C/s MAX	6°C/s MAX	360

### NOTES:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2

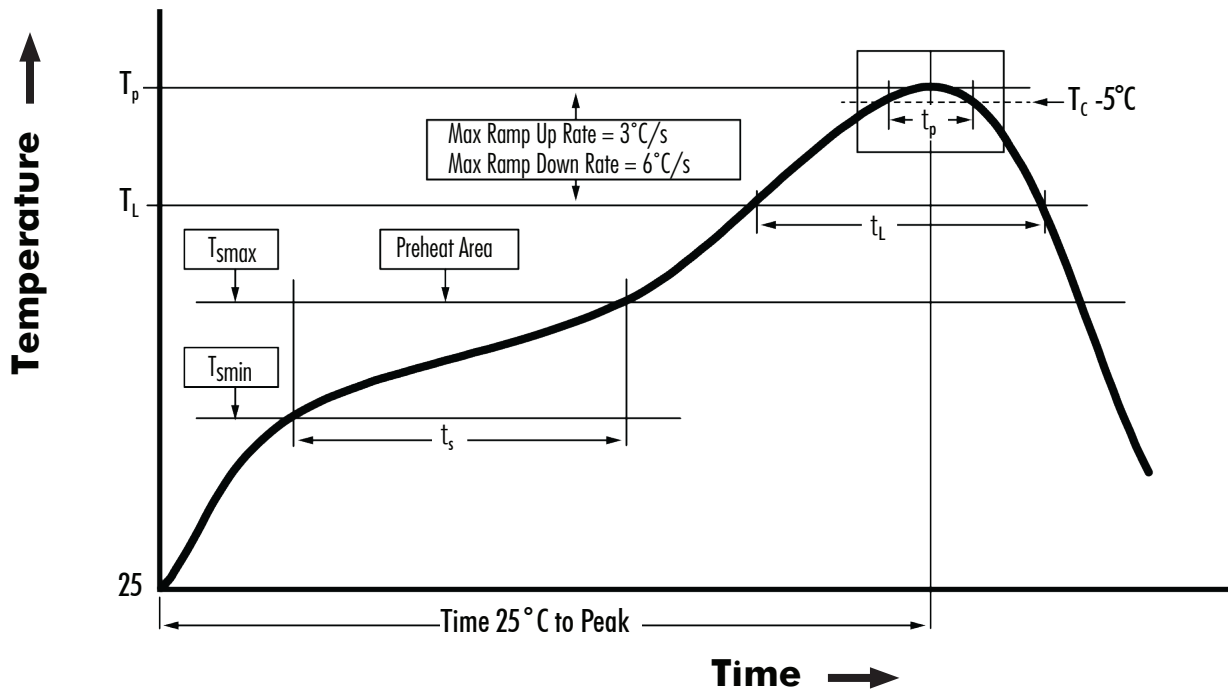


# 10G BASE-T PoE (++) TRANSFORMER MODULE

Ruggedized



## Non-Lead Recommended Reflow Profile (Based on J-STD-020D)



$T_{SMIN}$ (°C)	$T_{SMAX}$ (°C)	$T_L$ (°C)	$T_P$ (°C MAX)	$t_s$ (s)	$t_L$ (s)	$t_p$ (s MAX)	Ramp-up rate ( $T_L$ to $T_P$ )	Ramp-down rate ( $T_P$ to $T_L$ )	Time 25°C to peak temperature (s MAX)
150	200	217	245	60 - 120	60 - 150	30	3°C/s MAX	6°C/s MAX	480

### NOTES:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2



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