10/100BASE–T PoE/PoE+ APPLICATION SINGLE&DUAL PORT TRANSFORMER

Ruggedized

- Compliant with IEEE 802.3 standards
- Inductance (OCL):
  - 100B-1061: 350uH with 18mA DC bias
  - 100B-1062: 250uH with 36mA DC bias
  - 100B-1063: 350uH with 18mA DC bias
  - 100B-1064: 250uH with 36mA DC bias
- Operating temperature:
  - Normal: -40°C to +85°C
  - "X" Suffix: -55°C to +125°C
- Dielectric Withstanding Voltage (DWV):1500Vrms MAX
- Lead finish: Sn63Pb37
- Moisture Sensitivity Level: 3

Design Specifications

Part Number	Power (W Max)	Port	Current Rating Per pair (mA Max)	Package	Max Height (inch Max)
100B-1061(X)	30	Single	600mA	16Pin	0.245
100B-1062(X)	60	Single	1200mA	16Pin	0.245
100B-1063(X)	30	Dual	600mA	24Pin	0.265
100B-1064(X)	60	Dual	1200mA	24Pin	0.265

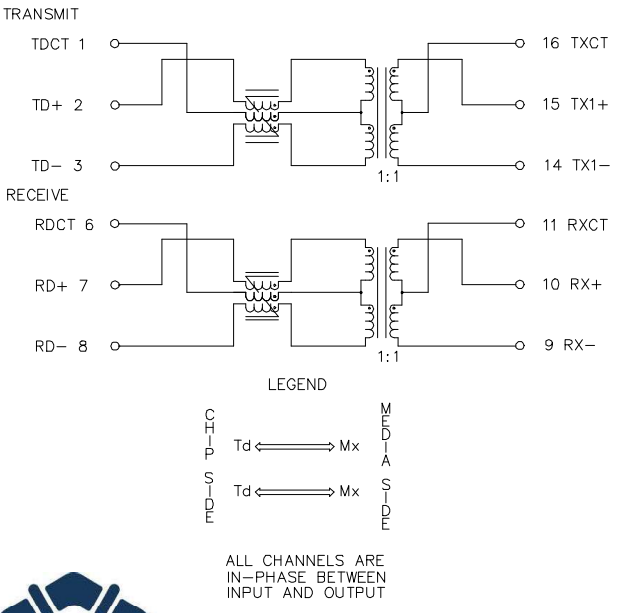
Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB Max)				Return Loss (dB Min)			Crosstalk (dB Min)				DM to CM Rejection Ratio (dB Min)		
	0.1 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
100B-1061	1.2	1.2	1.2	1.2	18	14	12	50	43	37	33	43	37	33
100B-1061X	1.2	1.2	1.2	1.2	18	14	12	50	43	37	33	43	37	33
100B-1062	1.2	1.2	1.2	1.2	18	12	10	50	43	37	33	43	37	33
100B-1062X	1.2	1.2	1.2	1.2	18	12	10	50	43	37	33	43	37	33
100B-1063	1.2	1.2	1.2	1.2	18	14	12	50	43	37	33	43	37	33
100B-1063X	1.2	1.2	1.2	1.2	18	14	12	50	43	37	33	43	37	33
100B-1064	1.2	1.2	1.2	1.2	18	12	10	50	43	37	33	43	37	33
100B-1064X	1.2	1.2	1.2	1.2	18	12	10	50	43	37	33	43	37	33

Notes: 1. Add suffix "**NL**" for RoHS compliant version; i.e. 100B-1061 becomes **100B-1061NL** NL parts have 100% SN Lead Finish.
2. For Tape & Reel packaging, add "**T**" suffix at the end of the part number for: i.e. **100B-1061XNLT**).

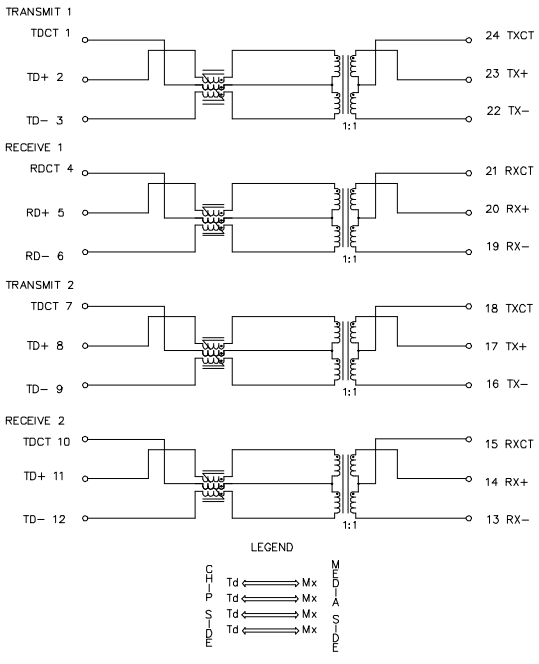
Electrical Schematic

100B-1061(X)/62(X)



ALL CHANNELS ARE IN–PHASE BETWEEN INPUT AND OUTPUT

100B-1063(X)/64(X)



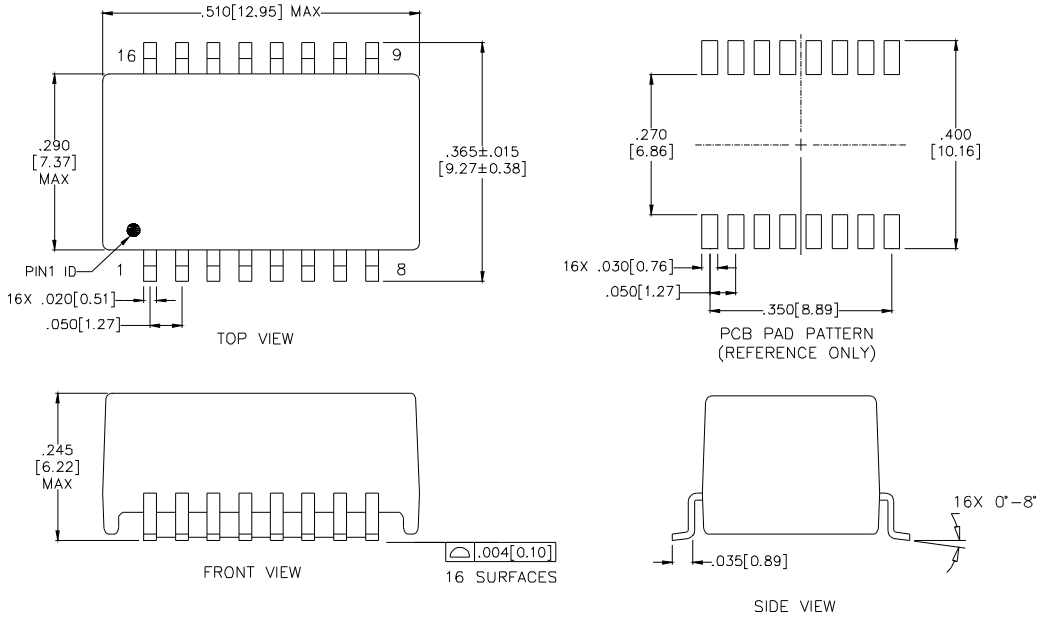
ALL CHANNELS ARE IN–PHASE BETWEEN INPUT AND OUTPUT

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2022. iNRCORE, LLC. All rights reserved.

Mechanical

100B-1061(X)/62(X)

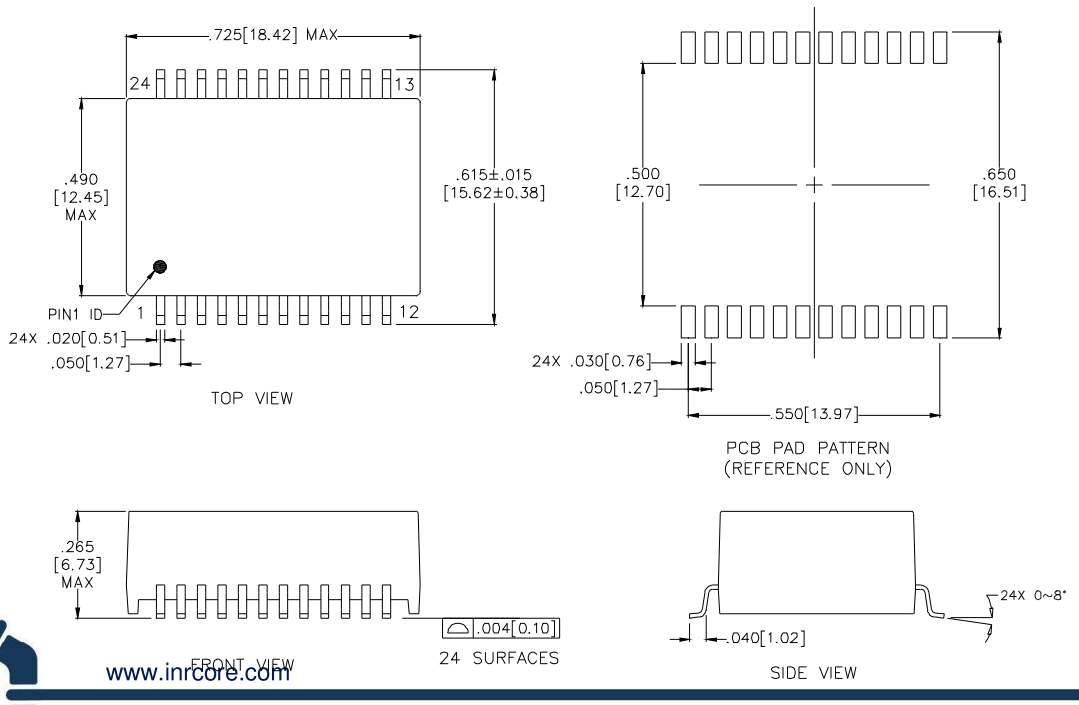
Dimensions: inches[mm]
Tolerances (unless otherwise specified): ±0.010[0.25]



Mechanical

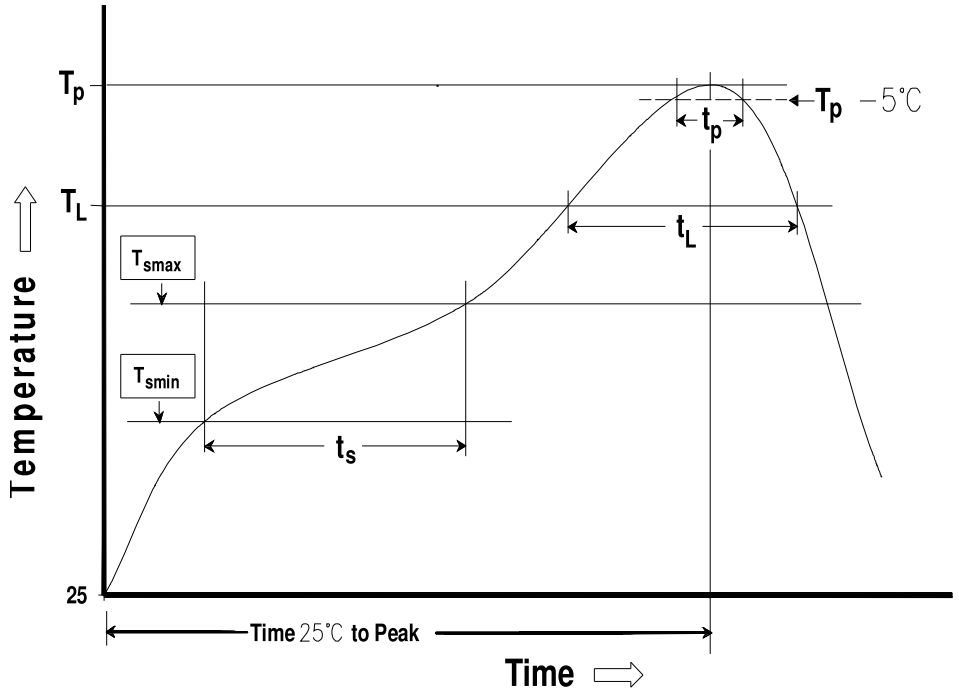
100B-1063(X)/64(X)

Dimensions: inches[mm]
Tolerances (unless otherwise specified): ±0.010[0.25]



Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2022. iNRCORE, LLC. All rights reserved.

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

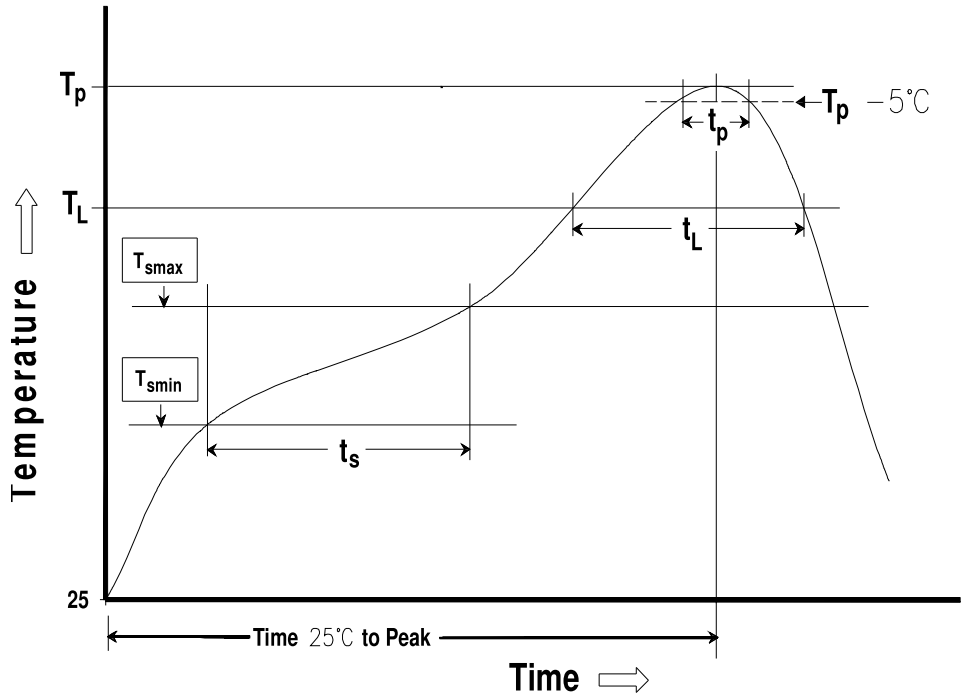


T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_S (s)	t_L (s)	t_P (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
100	150	183	220	60-120	60-150	20	3°C/s MAX	6°C/s MAX	360

Notes:
1. All temperatures measured on the package leads.
2. Maximum number of reflow cycles not to exceed 2.

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2022. iNRCORE, LLC. All rights reserved.

Lead−Free 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 number of reflow cycles not to exceed 2.

For More Information

iNRCORE,LLC
311 Sinclair Road Bristol,
PA 19007-6812 U.S.A
Tel: + 1.215.781.6400
Fax: +1.215.7816430

Dongguan iNRCORE Co. Ltd
No.7 An Li Road
Changan Town, Dongguan City, China
Tel: +0769 8165 9962

Global Sales Representatives and locations:
http://www.inrcore.com

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2022. iNRCORE, LLC. All rights reserved.