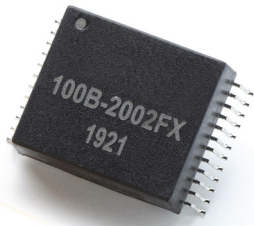


10/100BASE - TX SINGLE PORT TRANSFORMER MODULE



Ruggedized



- ⊗ Compliant with IEEE 802.3u & ANSI X3.263 standards
- ⊗ 350μH OCL with 8mA bias at extended temperatures
- ⊗ Operating and storage temperature:
100B-2002F: -40°C to +85°C
100B-2002FX: -55°C to +125°C
- ⊗ Moisture Sensitivity Level: 3
- ⊗ Epoxy encapsulated package withstands 235°C peak temperature
- ⊗ Terminal Finish: matte tin allow solder over nickel layer
- ⊗ Lead Finish: Sn63 Pb37 finish for non-RoHS products
- ⊗ Sn100 Finish: for RoHS products using NL suffix

Electrical Specifications @ 25°C

Part Number	Insertion Loss (dB MAX)				Return Loss (dB MIN)						Crosstalk (dB MIN)				DM to CM Rejection Ratio (dB MIN)			DWW (Vrms)
	0.10 MHz	30 MHz	60 MHz	100 MHz	2 MHz	30 MHz	40 MHz	50 MHz	60 MHz	80 MHz	1 MHz	30 MHz	60 MHz	100 MHz	1 MHz	60 MHz	100 MHz	
100B-2002F	1.2	1.2	1.2	1.2	18	18	16	15	12	12	50	43	37	33	43	37	33	1500
100B-2002FX	1.2	1.2	1.2	1.2	18	18	16	15	12	12	50	43	37	33	43	37	33	1500

NOTES:

1. Add suffix "NL" for RoHS (Sn100 Lead Finish) compliant version; i.e. 100B-2002F becomes 100B-2002FNL
2. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. 100B-2002FXLT
3. IC Grade transfer-molded package withstands 235°C peak temperature profile; RoHS version withstands 245°C.

Mechanicals

Electrical Schematics

100B-2002FX

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

PCB PAD PATTERN
(REFERENCE ONLY)

TRANSMIT

LEGEND



10/100BASE - TX SINGLE PORT TRANSFORMER MODULE



Ruggedized

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



$T_{S_{MIN}}$ (°C)	$T_{S_{MAX}}$ (°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



iNRCORE, LLC
 311 Sinclair Road, Bristol, PA 19007-6812 USA
 Tel: +1.215.781.6400 Fax: +1.215.781.6430

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, 2020. iNRCORE, LLC. All rights reserved.

M110.L (07/21)