

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# 10/100BASE-TX DUAL-PORT TRANSFORMER MODULES

Ruggedized





- Compliant with IEEE 802.3u and 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

MSL: 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

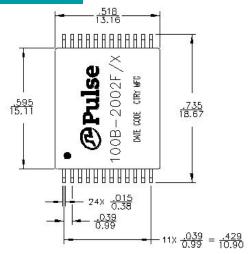
Electrical Specifications @ 25°C													
Part Number	Insertion Loss (dB MAX)	<b>Return Loss</b> (dB MAX)					<b>Crosstalk</b> (dB MIN)				<b>DM to C</b> <b>Rejection F</b> (dB MA)	Dielectric Withstand Voltage @5s MIN (VRMS)	
Number	0.1-100MHz	2-30MHz	40MHz	50MHz	60-80MHz	1MHz	30MHz	60MHz	100MHz	30 MHz	60 MHz	100 MHz	PRI:SEC
100B-2002F	-1.20	-18	-16	-15	-12	-50	-43	37	-33	-43	-37	-33	1500
100B-2002FX	-1.20	-18	-16	-15	-12	-50	-43	37	-33	-43	-37	-33	1500
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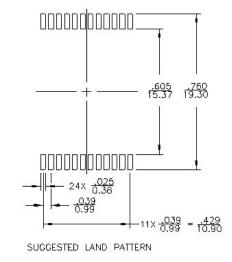
**Notes:** 1. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. 100B-2002F becomes 100B-2002FT). Pulse complies to industry standard tape and reel specification EIA481.

- 2. Suffix "NL" for RoHS (Sn100 Lead Finish); i.e. 100B-2002FNL
- 3. IC Grade transfer-molded package withstands 235°C peak temperature profile; RoHS version withstands 245°C

#### **Mechanical**

#### 100B-2002F/X



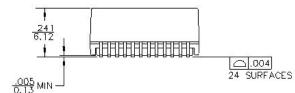


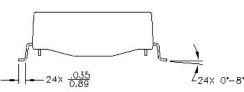
Weight......3.0grams
Tape and Reel.....300/reel
Tube.....25/tube

Dimensions: Inches mm

Unless otherwise specified,

all tolerances are  $\pm \frac{.010}{0.25}$ 



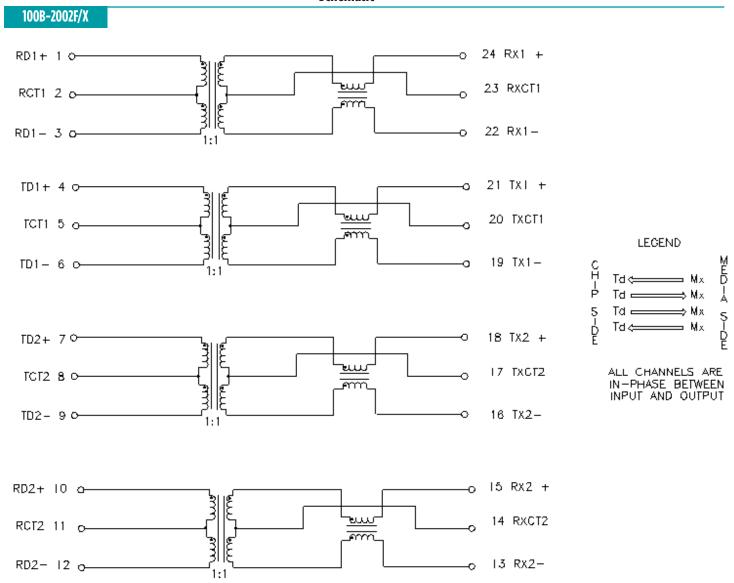


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### Schematic

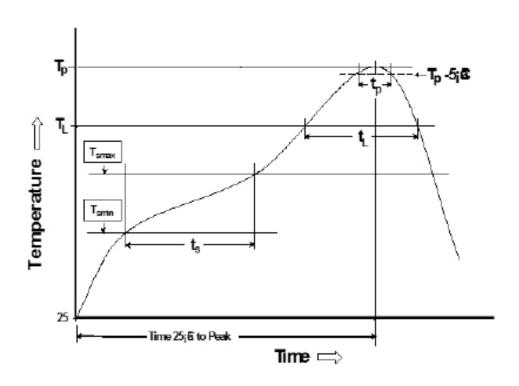


## 10/100BASE-TX DUAL-PORT TRANSFORMER MODULES

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



T <sub>SMIN</sub> (°C)		T <sub>L</sub> (°C)	T <sub>P</sub> (°C MAX)	t <sub>S</sub> (s)	t <sub>L</sub> (s)	t <sub>P</sub> (s MAX)	Ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	Ramp-down rate (T <sub>P</sub> to T <sub>L</sub> )	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.

### For More Information

**Pulse North America** Headquarters Two Pearl Buck Court Bristol, PA 19007 U.S.A.

Tel: 215 781 6400 Fax: 215 781 6403

# **For Global Sales Representatives and Locations Visit:** http://www.pulseruggedized.com

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