







1000BASE-T SINGLE PORT TRANSFORMER MODULES



-  Compliant with IEEE 802.3 Standard
-  350 μ OCL with 8mA bias at extended temperatures
-  Operating temperature: -40°C to +85°C
-  Storage temperature: -55°C to +125°C
-  Lead Finish: Hot Dip Sn63/Pb37 Solder
-  MSL: 3, RoHS peak reflow temperature rating 235°C

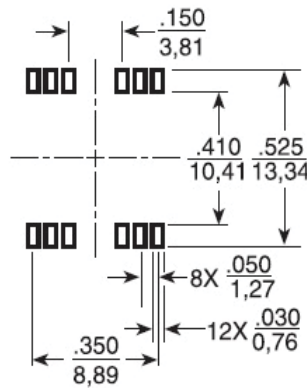
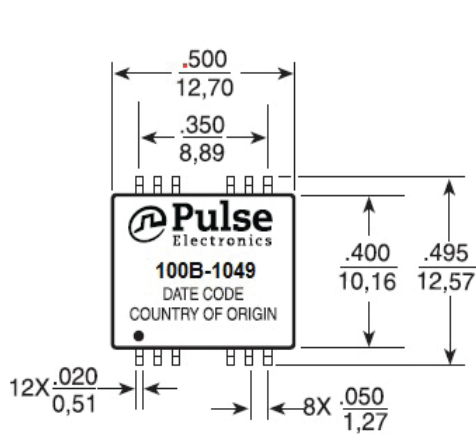
Electrical Specifications @ 25°C — Operating Temperature -40°C to +85°C

Part Number	Turns Ratio ($\pm 5\%$)		Insertion Loss (dB MAX)	Return Loss (dB MIN)			Differential to Common Mode Rejection (dB MIN)			Crosstalk (dB MIN)			Hipot (Vrms MIN)
	TX	wRX	100 KHz-100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	62 MHz	100 MHz	
100B-1049	1:1	1:1	-1.0	-16	-12	-12	-42	—	-33	-45	-40	-35	1500

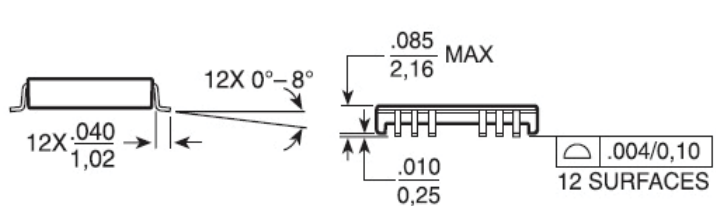
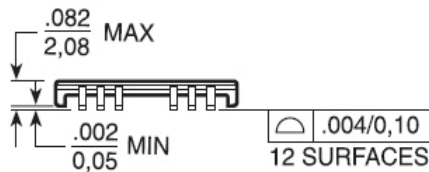
Notes: 1. Add suffix "NL" for RoHS compliant part: i.e. 100B-1049 becomes 100B-1049NL. 2. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. 100B-1049 becomes 100B-1049T)

Mechanical

100B-1049/NL



SUGGESTED LAND PATTERN

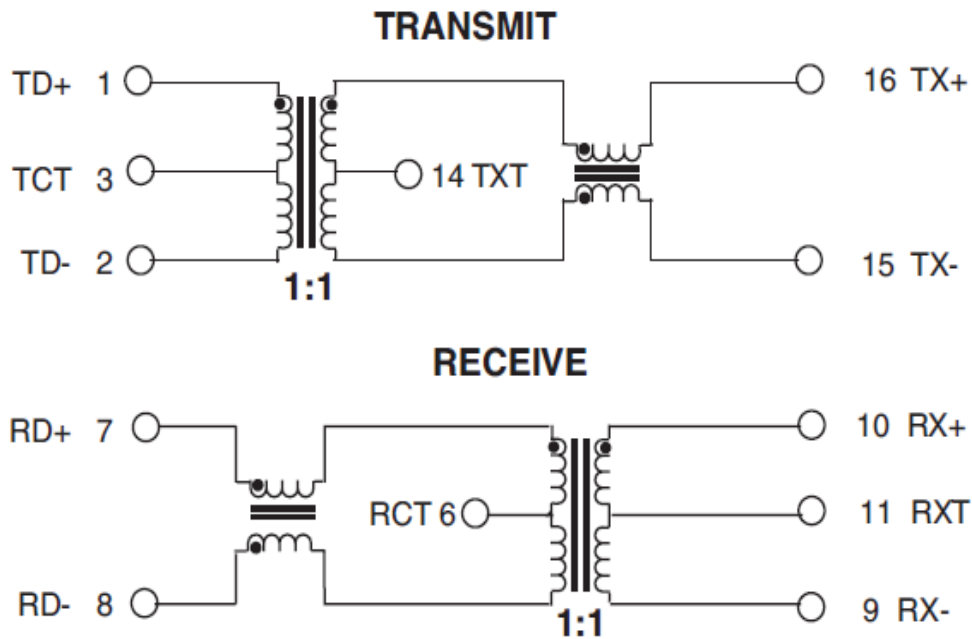


Weight0.3 grams
Tape & Reel500/Reel
Tube 40/Tube

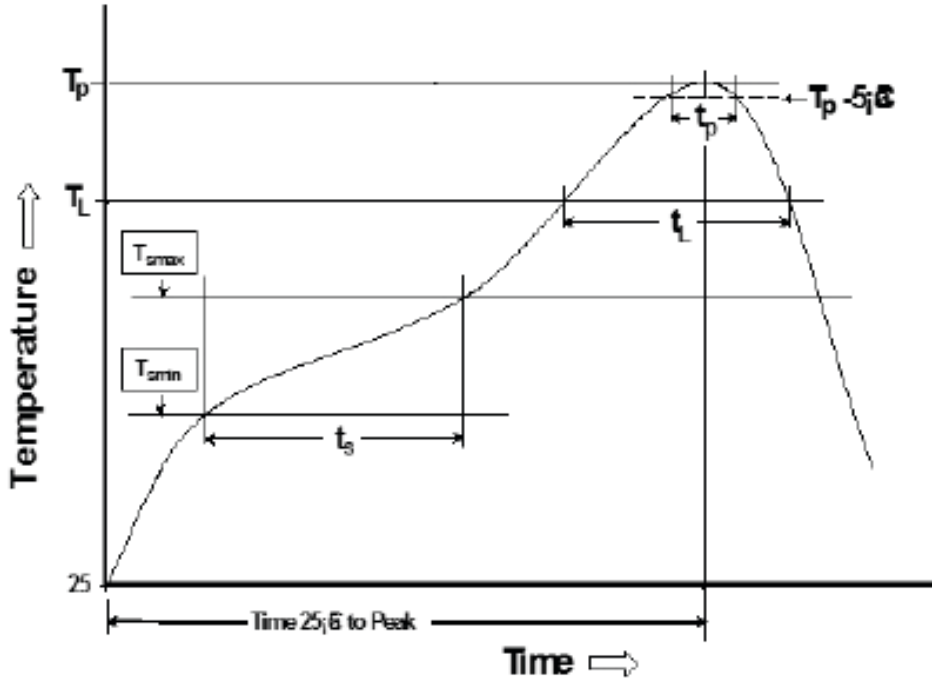
Dimensions: $\frac{\text{Inches}}{\text{mm}}$ Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

100B-1049/NL

Schematic



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.

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