10/100 BASE-T SINGLE PORT TRANSFORMER MODULE

Industrial Grade



- Compliant with IEEE 802.3 standards
- 350µH OCL with 8mA D.C.bias at 100KHz, 100mV
- Dielectric Withstanding Voltage (DWV): 1500 Vrms
- Operating Temperature: -40° C to $+85^{\circ}$ C
- Lead Finish: Pure Tin
- Moisture Sensitivity Level: 1

Electrical Specifications @ 25°C															
	Insertion Loss				Return Loss					Crosstalk			DM to CM Rejection Ratio		
	(dB MAX)				(dB MIN)					(dB MIN)			(dB MIN)		
Part	0.10	30	60	100	5	30	50	60	80	30	60	100	30	60	100
Number	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz
R1022NL	1.2	1.2	1.2	1.2	18	18	14	14	12	45	40	35	42	37	32

NOTES:

- 1. For Tape & Reel packaging, add "T" suffix at the end of the part number: i.e. R1022NLT.
- 2. Country of Origin: China

Mechanicals **Electrical Schematics** Dimensions: inch [mm] Tolerance (unless otherwise specified): ±0.010 [0.25] R1022NL TRANSMIT LEGEND —— 0.510 [12.95] —— MAX 日日日日日日日 (TD+) 1 0 16 (TX+) 0.270 0.400 [10.16] (TCT) 2 o 15 (CMT) m 0.365±0.015 [9.27±0.38] (TD-) 3 c -0 14 (TX-)]0000000 All channels are in phase between input and output 16X 0.030 [0.76] 0.050 [1.27] RECEIVE TX 0.050 = 0.350 - | SUGGESTED PAD LAYOUT (REFERENCE ONLY) 16X 0.020 [0.51] 0.050 [1.27] ○ 11 (RX+) (RD+) 6 ° ww (RCT) 7 → 10 (CMT) _____ -⊙ 9 (RX-) (RD-) 8 O 0.235 [5.97] ← 16X 0.035 [0.89]

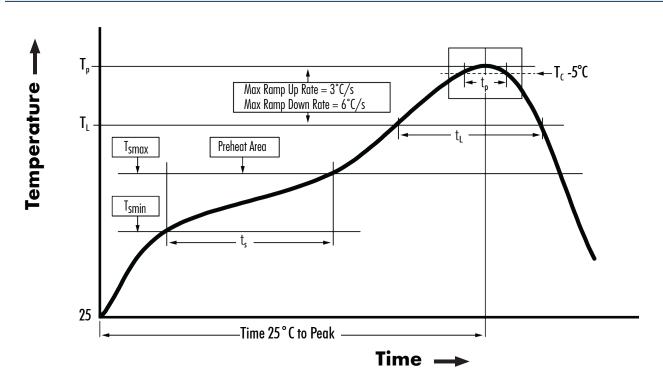


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Recommended Reflow Profile (Based on J-STD-020D)



T _{smin} (°C)	T _{smax} (°C)	T _L (°C)	T _P (°C MAX)	† _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)		
Non-Lead Profile											
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.

