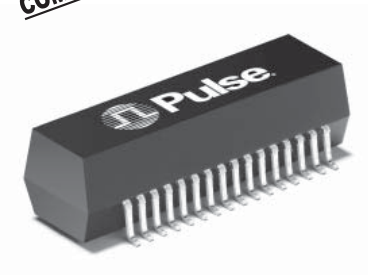
T3/DS3/E3/STS -1 TRANSFORMERS
Surface Mount Package



- RoHS peak reflow temperature rating: 245°C
- Quad transformers in SMT package supports two T1/E1 ports
- Available in transmit and/or receive configurations
- Models matched to leading quad, dual T1/E1/ CEPT transceivers
- UL recognized
- Isolation voltage: 1500 Vrms

Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Part Number	Turns Ratio [A, B] (Pri:Sec ±2%)	OCL @ 25°C (mH MIN)	L_L (µH MAX)	$C_{W/W}$ (pF MAX)	DCR Pri (MAX)	DCR Sec (MAX)	Package/ Schematic [D]	Primary Pins
T1001NL[C]	1:1.36 / 1	1.2	0.40	30	0.7	1.0	YB/1	1-3, 5-7, 10-12, 14-16
T1006NL	1:2CT	1.2	0.35	30	0.6	1.0	YB/1	1-3, 5-7, 10-12, 14-16
T1007NL	1:1.15CT	1.2	0.70	23	0.6	0.8	YB/1	1-3, 5-7, 10-12, 14-16
T1009NL	1:1.265 / 1	1.2	0.80	35	0.6	0.8	YB/1	1-3, 5-7, 10-12, 14-16

A. **OCL** (primary inductance) and **L_L** (leakage inductance) are measured at the primary winding. **Turns Ratio** is specified primary: secondary (**CT** = Center Tap).

B. **To make a 1:1** ratio from a 1:2CT ratio, use one-half of the secondary (2CT) winding.

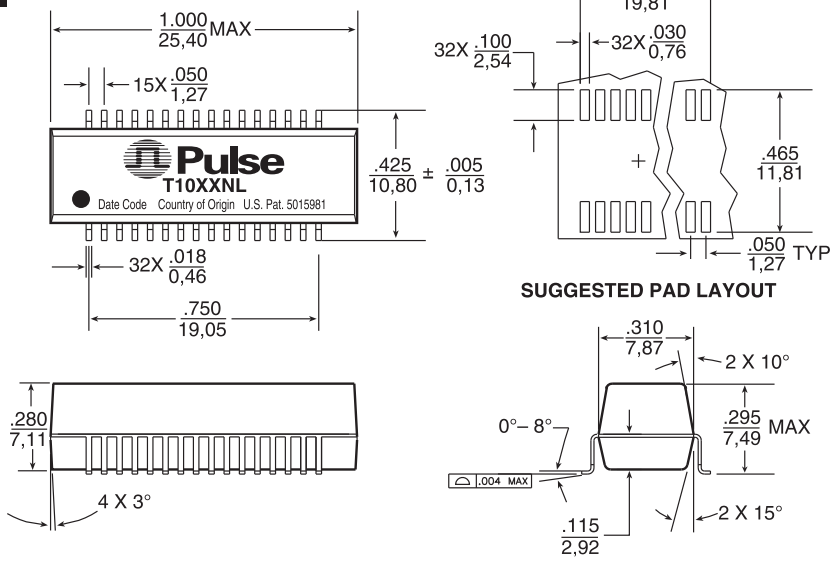
C. **Dual Ratio Transformers** — These transformers have tapped secondary windings to provide two turns ratios (T/R). Use entire primary winding and connect secondary pins listed below to obtain desired turns ratio:

Part Number	Turns Ratio 1	Secondary Pins	Turns Ratio 2	Secondary Pins
T1001NL	1:1	31-32, 27-28, 22-23, 18-19	1:1.36	30-32, 26-28, 21-23, 17-19

D. **Standard** packaging is anti-static tubes. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number, (i.e. T006NL**T**).

Mechanical

YB

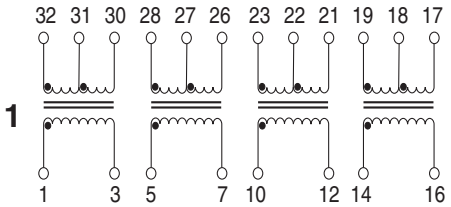


Weight . . . . . .2.7 grams
Tape & Reel 200/reel
Tube 20/tube

Dimensions: Inches / mm

Unless otherwise specified, all tolerances are ± .010 / 0,25

Schematic



T3/DS3/E3/STS -1 TRANSFORMERS
Surface Mount Package

IC Manufactur	IC Part Number	Application	Transmit/ Receive	Pulse Part Number	Ratio	Pins
LEVEL ONE	LXT3LXT32	T1	Receive	**T1006NL**	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Transmit	**T1006NL**	1:2	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	**T1006NL**	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
VLSI	VP14Q575	T1	Transmit	**T1007NL**	1:1.15	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	**T1006NL**	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Receive	**T1006NL**	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
AT&T/LUCENT	T7690 (5V)	T1	Transmit	**T1007NL**	1:1.15	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	**T1007NL**	1:1.15CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
EXAR	XR-5793/5795	T1	Transmit	**T1009NL**	1:1.265	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14- 16) : (19-17)
			Receive	**T1009NL**	1:1	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
		75Ω/E1	Transmit	**T1009NL**	1:1	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
		120Ω/CEPT	Transmit	**T1009NL**	1:1.265	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Receive	**T1009NL**	1:1	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)

Common Mode Chokes for Telecom Applications

Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Pulse Part Number	Turns Ratio (±5%)	OCL (µH MIN)	$C_{w/w}$ (pF MAX)	L_L (µH MAX)	DCR (Ω MAX)	Isolation (Vrms MIN)	Package
HIGH FREQUENCY COMMON MODE CHOKES, 4-LINES							
PE-65554NL	1:1:1:1	24.0	15	.20	0.30	500	Through Hole
PE-65555NL	1:1:1:1	8.0	10	.20	0.25	500	Through Hole
PE-65854NL	1:1:1:1	47.0	16	.20	0.30	500	Surface Mount
PE-65857NL	1:1:1:1	24.0	15	.23	0.30	500	Surface Mount

NOTE: See the "G002" (Common Mode Choke Catalog) for mechanicals and schematics.

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