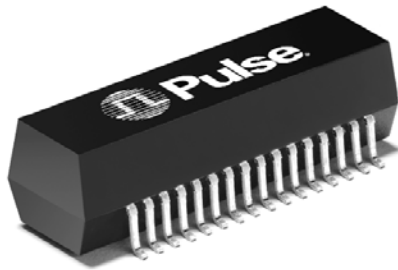


T1/E1/CEPT/ISDN-PRI QUAD TRANSFORMERS Surface Mount Package



- Quad transformers in a surface mount package supports two T1/E1 ports
- Available in transmit and/or receive configurations
- Models matched to leading quad and dual T1/E1/CEPT transceivers
- Recognized by UL1459 and UL1950
- BABT approval to EN60950 pending
- Isolation voltage: 1500 Vrms

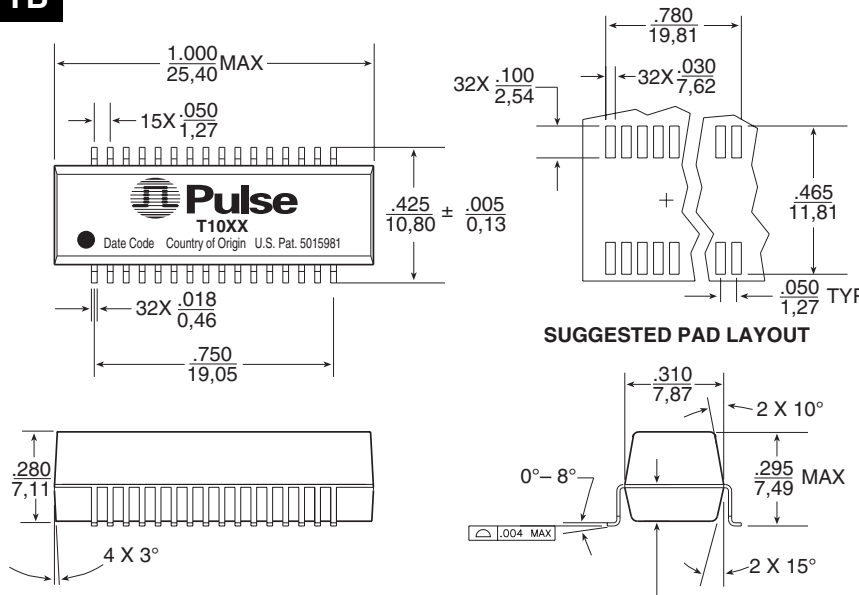
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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
T1001 ^C	1:1.36 / 1	1.2	0.40	30	0.7	1.0	YB/1	1-3, 5-7, 10-12, 14-16
T1005 ^C	1:1.58 / 1.266	1.2	0.50	24	0.6	0.8	YB/1	1-3, 5-7, 10-12, 14-16
T1006	1:2CT	1.2	0.35	30	0.6	1.0	YB/1	1-3, 5-7, 10-12, 14-16
T1007	1:1.15CT	1.2	0.70	23	0.6	0.8	YB/1	1-3, 5-7, 10-12, 14-16
T1008	1:1.36 and 1:2	1.2	0.80	35	0.6	1.0	YB/2	1-3, 10-12, 19-17, 28-26
T1009	1:1.265 / 1	1.2	0.80	35	0.6	0.8	YB/1	1-3, 5-7, 10-12, 14-16
T1010 ^C	1:1.36CT	1.2	0.50	30	0.6	0.8	YB/1	1-3, 5-7, 10-12, 14-16
T1016 ^C	1:2 / 1.15	1.2	0.40	30	0.6	1.0	YB/1	1-3, 5-7, 10-12, 14-16
T1017	1:2.3 / 2	1.2	0.80	35	0.6	1.1	YB/3	1-3, 28-26, 10-12, 19-17

Mechanical

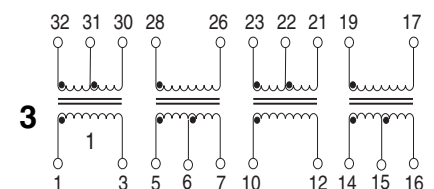
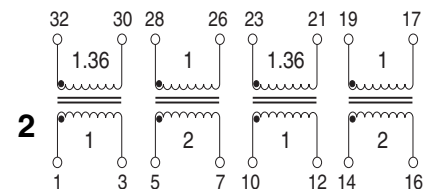
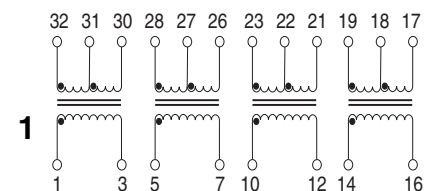
Schematics

YB



Weight 2.7 grams
Tape & Reel200/reel
Tube20/tube

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$



T1/E1/CEPT/ISDN-PRI QUAD TRANSFORMERS Surface Mount Package



IC Manufacturer	IC Part Number	Application	T/R	Pulse Part No.	Ratio	Pins
LEVEL ONE	LXT332	T1	Transmit	T1017	1:2.3	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1006	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Transmit	T1006	1:2	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1006	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
VLSI	VP14Q575	T1	Transmit	T1007	1:1.15	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1006	1:2CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		75Ω/E1	Transmit	T1005	1:1.266	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
		120Ω/CEPT	Transmit	T1005	1:1.58	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Receive	T1006	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	T1007	1:1.15	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1007	1:1.15CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Transmit	T1010	1:1.36	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1010	1:1.36CT	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
PMC-SIERRA	PM4314QDSX	T1	Transmit	T1008	1:1.36	(1-3) : (32-30), (10-12) : (23-21)
			Receive	T1008	1:2	(28-26) : (5-7), (19-17) : (14-16)
		E1/CEPT	Transmit	T1008	1:1.36	(1-3) : (32-30), (10-12) : (23-21)
			Receive	T1008	1:2	(28-26) : (5-7), (19-17) : (14-16)
EXAR	XR-5793/5795	T1	Transmit	T1009	1:1.265	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1009	1:1	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
		75Ω/E1	Transmit	T1009	1:1	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
		120Ω/CEPT	Transmit	T1009	1:1.265	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
		E1/CEPT	Receive	T1009	1:1	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
CRYSTAL	CS61582/3/4 (5V)	T1	Transmit	T1016	1:2	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1016	1:1.15	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
		E1/CEPT	Transmit	T1016	1:2	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)
			Receive	T1016	1:1.15	(1-3) : (32-31), (5-7) : (28-27), (10-12) : (23-22), (14-16) : (19-18)
	CS61584 (3V)	T1/E1/CEPT	Trans/Rec	T1016	1:2	(1-3) : (32-30), (5-7) : (28-26), (10-12) : (23-21), (14-16) : (19-17)

NOTES FROM TABLES

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 #	Turns Ratio 1	Secondary Pins	Turns Ratio 2	Secondary Pins
T1001	1:1	31-32, 27-28, 22-23, 18-19	1:1.36	30-32, 26-28, 21-23, 17-19
T1005	1:1.266	31-32, 27-28, 22-23, 18-19	1:1.58	30-32, 26-28, 21-23, 17-19
T1016	1:1.15	31-32, 27-28, 22-23, 18-19	1:2	30-32, 26-28, 21-23, 17-19
T1017	1:2	31-32, 5-6, 22-23, 14-15	1:2.3	30-32, 5-7, 21-23, 14-16

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. T001T).

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)	Cw/w (pF MAX)	LL (μH MAX)	DCR (Ω MAX)	Isolation (Vrms MIN)	Package
HIGH FREQUENCY COMMON MODE CHOKES, 4-LINES							
PE-65554	1:1:1:1	24.0	15	.20	0.30	500	Through Hole
PE-65555	1:1:1:1	8.0	10	.20	0.25	500	Through Hole
PE-65854	1:1:1:1	47.0	16	.20	0.30	500	Surface Mount
PE-65857	1:1:1:1	24.0	15	.23	0.30	500	Surface Mount

Note: See G002 for Mechanicals and Schematics of Common Mode Chokes.

For More Information :

UNITED STATES (Worldwide)	UNITED KINGDOM (Northern Europe)	FRANCE (Southern Europe)	SINGAPORE (Southern Asia)	TAIWAN, R.O.C. (Northern Asia)	DISTRIBUTOR
12220 World Trade Drive San Diego, CA 92128 U.S.A. http://www.pulseeng.com TEL: 858 674 8100 FAX: 858 674 8262	1 & 2 Huxley Road The Surrey Research Park Guildford, Surrey GU2 5RE United Kingdom TEL: 44 1483 401700 FAX: 44 1483 401701	Zone Industrielle F-39270 Orgelet France TEL: 33 3 84 35 04 04 FAX: 33 3 84 25 46 41	150 Kampong Ampat #07-01/02 KA Centre Singapore 368324 TEL: 65 287 8998 FAX: 65 280 0080	3F-4, No. 81, Sec. 1 HsinTai Wu Road Hsi-Chih, Taipei Hsien Taiwan, R.O.C. Tel: 886 2 2698 0228 FAX: 886 2 2698 0948	

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 products and/or registered trademarks of their respective owners.