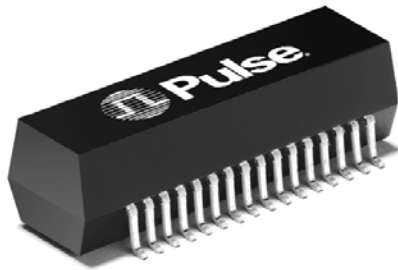


T1/E1/CEPT/ISDN-PRI QUAD TRANSFORMERS Surface Mount Package



- 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
- UL recognized
- Isolation voltage: 1500Vrms

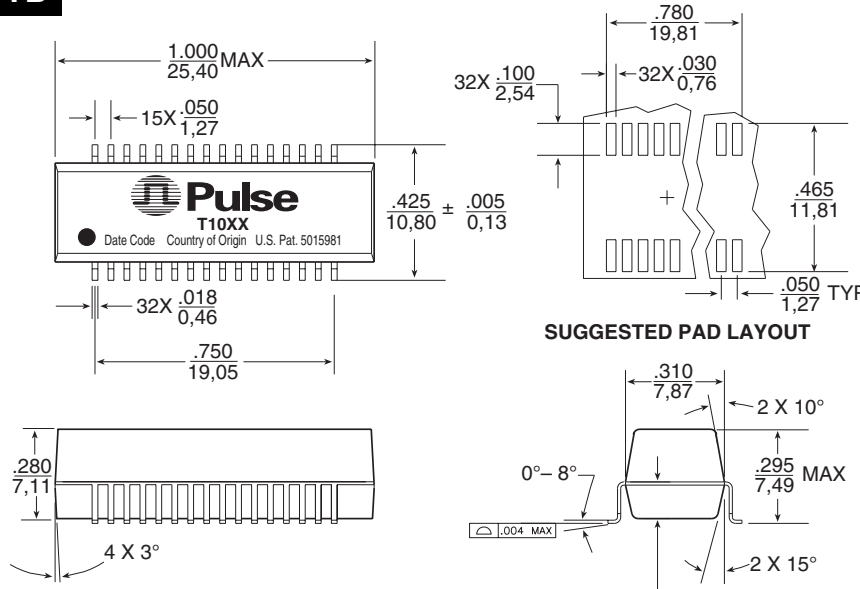
Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

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

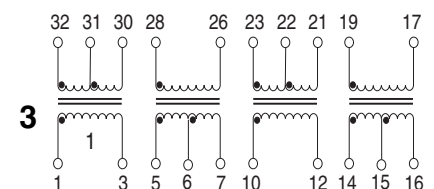
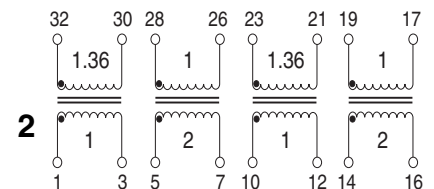
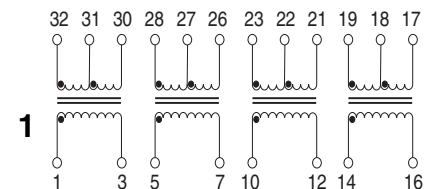
Schematics

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:

Pulse Worldwide Headquarters

12220 World Trade Dr.
San Diego, CA 92128
U.S.A.
www.pulseeng.com

Tel: 858 674 8100
Fax: 858 674 8262

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 0
Fax: 49 7032 7806 12

Pulse China Headquarters

B402, Shenzhen
Tech-Innovation International
Tenth Kejinan Rd.
High-Tech Industrial Park
Nanshan District, Shenzhen
China

Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China

Room 1503
XinYin Building
No. 888 YiShan Rd.
Shanghai 200233
China

Tel: 86 21 54643211/2
Fax: 86 21 54643210

Pulse South Asia

150 Kampong Ampat
#07-01/02
KA Centre
Singapore 368324

Tel: 65 6287 8998
Fax: 65 6280 0080

Pulse North Asia

No. 26
Kao Ching Rd.
Yang Mei Chen
Taoyuan Hsien
Taiwan, R. O. C.

Tel: 886 3 4641811
Fax: 886 3 4641911

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 trademarks or registered trademarks of their respective owners. © Copyright, 2007. Pulse Engineering, Inc. All rights reserved.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse:

[T1007T](#) [T1008T](#) [T1006T](#) [T1010T](#) [T1001](#) [T1007](#) [T1009](#) [T1005](#) [T1010](#) [T1006](#) [T1008](#) [T1016](#) [T1017](#) [T1001T](#)
[T1009T](#) [T1005NL](#) [T1008NL](#) [T1008NLT](#) [T1010NL](#) [T1010NLT](#) [T1016NL](#) [T1017NL](#) [T1017NLT](#)