

# Pulse transformers

## SMD

### ALT series

Issue date: October 2012

- All specifications are subject to change without notice.
  - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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## REMINDERS

Please read this before using the product.

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The TDK products in this data are intended for usage in general electronics applications (computer, personal equipment, office equipment, measuring equipment, industrial robotics, domestic appliances, etc.).

They are neither intend nor warranted for usage in equipment that requires extraordinarily high quality and/or reliability or a malfunction or failure of which may cause loss of human life or bodily injury (atomic energy control instruments, airplane or spaceship instruments, transportation instrument, traffic signal instruments, combustion control instrument, medical instruments, all types of safety devices, etc.).

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### ALT Series ALT4532

#### FEATURES

- The ALT4532 Series is a wound chip type pulse transformer developed for LANs.
- Compatible with 10BASE-T, 100BASE-TX, and 1000BASE-T.
- High-quality product with automatic winding.
- Product conforming to RoHS directive.

#### APPLICATIONS

LAN interface portion of various devices such as network devices, communication devices, and digital home appliances

#### PRODUCT IDENTIFICATION

ALT	4532	- 201	- T	001
(1)	(2)	(3)	(4)	(5)

- (1) Series name  
 (2) Dimensions L×W  
 (3) Inductance[at 100kHz/DC bias=8mA]  
 201 : 200μH min.  
 (4) Packaging style  
 T: ø330mm reel taping  
 (5) TDK internal code

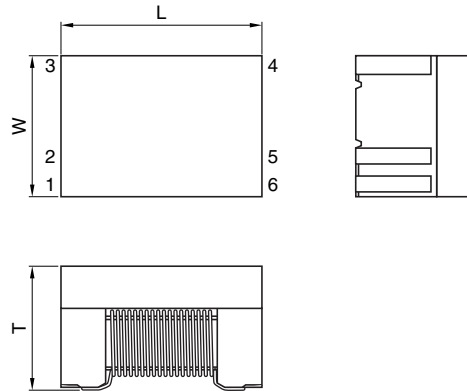
#### SPECIFICATIONS

Temperature range	Operating	-40 to +85°C
	Storage(After mount)	-40 to +85°C

#### PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity
Taping	ø180mm	2000 pieces/reel

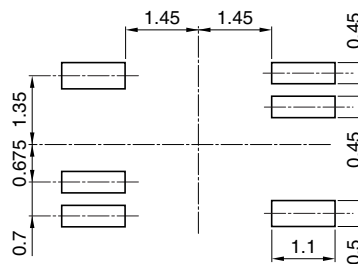
#### SHAPES AND DIMENSIONS



Dimensions in mm

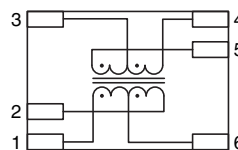
Type	L	W	T
ALT4532-171-T001	4.5±0.2	3.2±0.2	2.2max.
ALT4532-201-T001	4.5±0.2	3.2±0.2	2.9max.

#### RECOMMENDED PC BOARD PATTERN



Dimensions in mm

#### MEASURING CIRCUIT



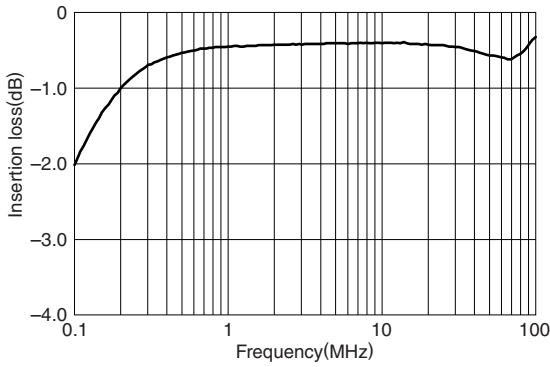
#### ELECTRICAL CHARACTERISTICS

Part No.	Turns ratio ①⑥② : ⑤③④	Inductance (μH)min. [DC bias 8mA, 100kHz] ①-② ⑤-④	Insertion loss (dB)max. [0.1 to 100MHz] ①②-⑤④	Inter-winding stray capacitance (pF)max. [100kHz]
ALT4532-171-T001	1CT : 1CT	170	2.5	35
ALT4532-201-T001	1CT : 1CT	200	1.5	35

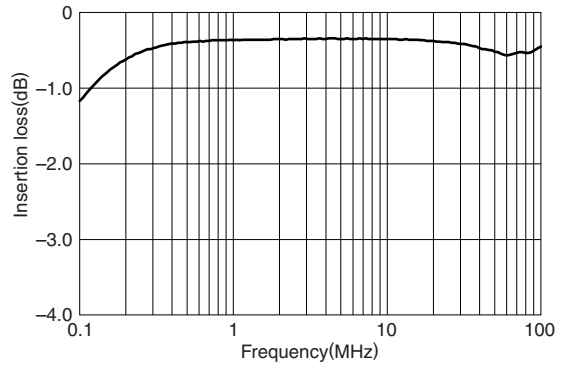
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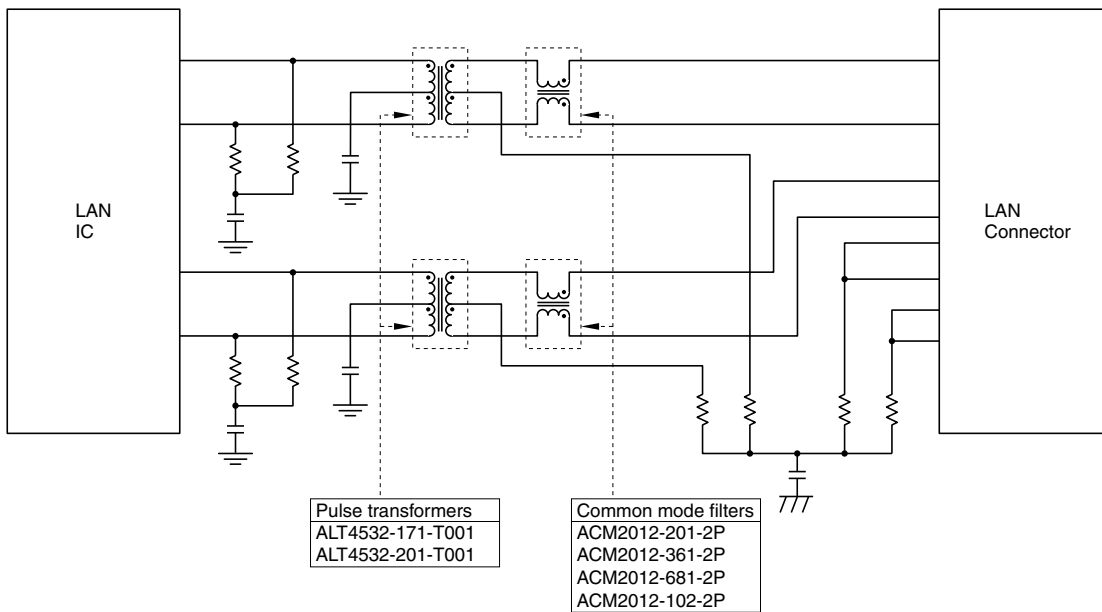
**TYPICAL ELECTRICAL CHARACTERISTICS**  
**INSERTION LOSS vs. FREQUENCY CHARACTERISTICS**  
**ALT4532-171-T001**



**ALT4532-201-T001**



**TYPICAL APPLICATIONS (100BASE-TX)**



Note) Peripheral circuits differ depending on the IC used; check the circuits with the application note of the IC, etc.

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