

ADSL Transformer

P3902

Features

- * Low Cost
- Low Distortion
- * IEC 950, UL 1950 and EN 60950 Certified
- * UL Recognized Component
- * BABT Certified
- * Supplementary Insulation
- * Surface Mount
- * Industry Standard Footprint

Applications

- * Texas Instruments CO and CPE
- * ADSL over POTS

DESCRIPTION

P3902 is designed for Central Office and Customer Premises ADSL over POTS applications using TI TNETD3000, and Central Office ADSL over POTS applications using TI TNETD4000.

P3902 is certified to standards IEC 950, EN 60950 and UL 1950 for supplementary insulation, 250V working voltage. P3902 is a UL Recognized Component and is supported by an IEC CB Test Certificate and BABT Certificate. The safety system yields very low transformer parasitics, ensuring that P3902 exhibits excellent frequency response and balance; in combination with its good harmonic distortion performance, P3902 is ideally suited to low cost yet demanding ADSL applications.





SPECIFICATIONS

Electrical

Typical values at $T = 25^{\circ}C$, unless otherwise stated.

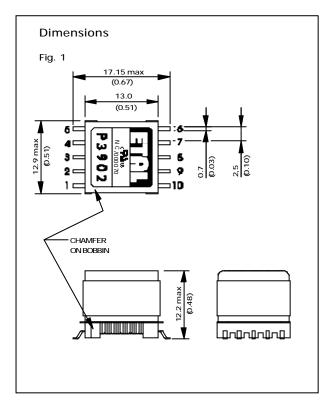
Parameter	Conditions	Min	Тур	Max	Units
Inductance	10kHz 100mV 1-4	1.42	1.50	1.58	mH
Leakage inductance	100kHz, 100mV Pins 1-4 (link 7-10)	-	-	15	μH
Interwinding capacitance	100kHz 100mV 1-10	-	20	30	pF
DC resistance	1-4 7-10	-	-	1.6 0.7	Ù Ù
Turns ratio	1-4 : 10-7	1.93	1.95	1.97	-
Voltage isolation ⁽¹⁾	50Hz DC (1,4 : 7,10)	2.12 3.0	-	-	kVrms kV
Operating range: Functional Storage	Ambient temperature	-40 -40	-	+85 +85	°C °C

Notes

1. Components are 100% tested at 3.25kV DC.



CONSTRUCTION

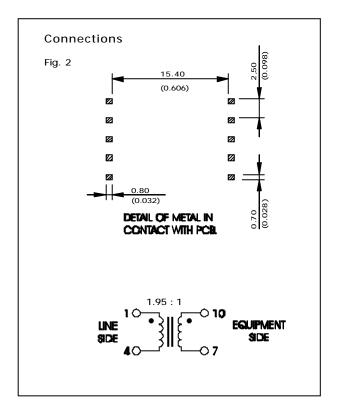


Dimensions shown are in millimetres (inches).

SAFETY

Constructed in accordance with IEC 950:1991, supplementary insulation, 250V maximum working voltage, flammability class V-0.

Installation requirements should be observed whereby a minimum of 1.0mm creepage and 1.5mm clearance is maintained between the ferrite core and accessible conductive parts in the host equipment.



ABSOLUTE MAXIMUM RATINGS

(Ratings of components independent of circuit).

Short term isolation voltage (1s)	2.12kVrms, 3.0kVDC
Storage temperature	-40ºC to +85ºC
Reflow temperature (10s)	260°C



CERTIFICATION

Certified by BSI to IEC 950:1991/A4:1996 (IEC CB Test Certificate No. GB518W) sub-clauses 1.5, 1.5.1, 1.5.3, 2.2, 2.2.2, 2.2.3, 2.2.4, 2.9.2, 2.9.3, 2.9.4, 4.4, 4.4.3.2 (class V-0) and 5.3 for a maximum working voltage of 250Vrms, nominal mains supply voltage not exceeding 300Vrms and a maximum operating temperature of +85°C in Pollution Degree 2 environments, supplementary insulation, clearance greater than 2.0mm, creepage greater than 2.5mm, distance through solid insulation greater than 0.4mm.

Recognized under the Component Recognition Program of Underwriters Laboratories Inc. to US and Canadian requirements CAN/CSA C22.2 No. 950-95/UL1950, Third Edition, including revisions through to revision date March 1, 1998, based on Fourth Amendment of IEC 950, Second Edition, maximum working voltage 250Vrms, Pollution Degree 2, supplementary insulation.

UL File number E203175. Certified by BABT to EN 60950. BABT Certificate NC/000070.

Additionally, Profec Technologies certifies all transformers as providing voltage isolation of 2.12kVrms, 3kV DC minimum. All shipments are supported by a Certificate of Conformity to current applicable safety standards.

COPYRIGHT

ETAL and P3902 are Trade Marks of Profec Technologies Ltd.

The Trade Mark ETAL is registered at the UK Trade Marks Registry.

Profec Technologies Ltd. is the owner of the design right under the Copyright Designs and Patents Act 1988 and no rights or licences are hereby granted or implied to any third party.

© 2000 Profec Technologies Ltd. Reproduction prohibited.





Profec Technologies Ltd., 10 Betts Avenue, Martlesham Heath, Ipswich, IP5 3RH, England
Telephone: +44 (0) 1473 611422Fax: +44 (0) 1473 611919
www.profec.comWebsites: www.etal.ltd.ukwww.profec.com
sales@profec.com