

ADSL Transformer

P3908

Features

- * Low Cost
- * Low Distortion
- * IEC 950, UL 1950 and EN 60950 Certified
- * UL Recognized Component
- * BAPT Certified
- * Supplementary Insulation
- * Surface Mount
- * Industry Standard Footprint
- * Directly replaces C1641, B2088

Applications

- * Globespan G7000 CPE
- * ADSL over POTS

DESCRIPTION

P3908 is a low distortion transformer for Customer Premises ADSL over POTS applications using the Globespan G7000 chipset.

P3908 is certified to safety standards IEC 950, EN 60950 and UL 1950 for supplementary insulation, 250V working voltage. P3908 is a UL Recognized Component and is supported by an IEC CB Test Certificate and BAPT Certificate.

The safety system yields very low transformer parasitics, ensuring that P3908 exhibits excellent frequency response and balance; in combination with its good harmonic distortion performance, P3908 is ideally suited to low cost yet demanding ADSL applications.



to Electronic Techniques
(Anglia) Limited

SPECIFICATIONS**Electrical**

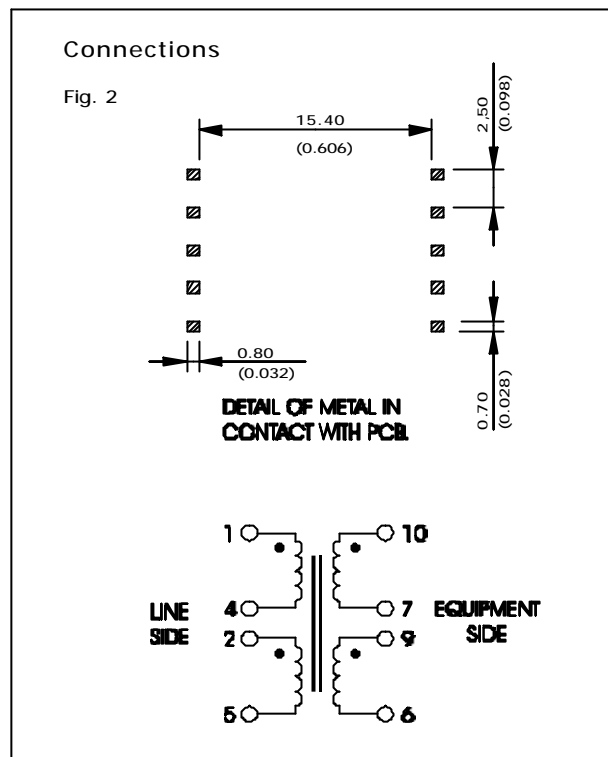
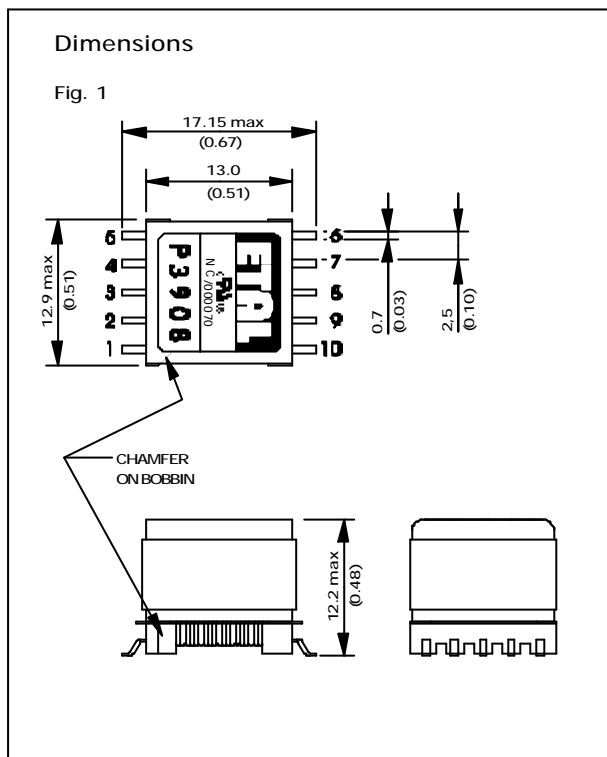
Typical values at T = 25°C, unless otherwise stated.

Parameter	Conditions	Min	Typ	Max	Units
Inductance	10kHz 100mV 1-5 (link 2-4)	410	433	455	μH
Leakage inductance	100kHz, 100mV, 1-5 (link 2-4; link 6, 7, 9, 10)	-	-	8	μH
Interwinding capacitance	100kHz 100mV 1-10 (link 1, 2, 4, 5; link 6, 7, 9, 10)	-	-	30	pF
DC resistance	1-4; 2-5; 6-9; 7-10	-	0.42	-	Ω
Turns ratio	1-4 : 2-5 10-7 : 9-6 1-4 : 10-7	0.99	1.00	1.01	-
Frequency response ⁽¹⁾	30kHz – 3MHz	-	-	±1.0	dB
Longitudinal balance ⁽¹⁾	20kHz – 1.1MHz	50	-	-	dB
Total Harmonic Distortion ⁽¹⁾	30kHz 2.5Vrms	-	-	-80	dB
Voltage isolation ⁽²⁾	50Hz DC (1, 2, 4, 5 : 6, 7, 9, 10)	2.12 3.0	- -	- -	kVrms kV
Operating range:	Ambient temperature				
Functional		-40	-	+85	°C
Storage		-40	-	+85	°C

Notes

- 100Ω source, 100Ω load.
- 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	-40°C to +85°C
Reflow temperature (10s)	260°C

CERTIFICATION

Certified by BSI to IEC 950:1991/A4:1996 (IECCB 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 BAPT to EN 60950.
BAPT 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 P3908 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
TRANSFORMING THE FUTURE



ISO 9001
FM 25326

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