

**ADSL TRANSFORMER****P2884****Features**

- \* Ultra-low profile, 7mm
- \* IEC 950, EN 60950 and EN 41003 certified
- \* Supplementary Insulation
- \* CSA NRTL/C Certificate of Compliance
- \* BABT Certificate of Recognition
- \* Excellent frequency characteristics
- \* Low distortion
- \* 2:1 ratio
- \* Vacuum encapsulated

**Applications**

- \* ADSL

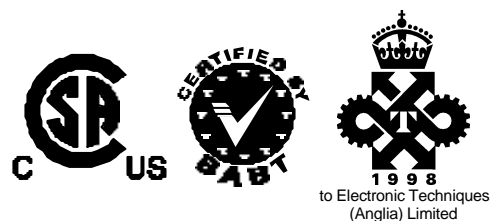
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**DESCRIPTION**

P2884 is a microprofile transformer for ADSL applications requiring safety isolation to international standards.

The ADSL requirements for good balance and frequency response, with low levels of distortion are achieved in a miniature package with a high level of safety insulation.

P2884 is certified to safety standards IEC 950, EN 60950 and EN 41003 for supplementary insulation, 250V working voltage. P2884 is supported by an IEC CB Test Certificate, CSA Certificate of Compliance and BABT Certificate.



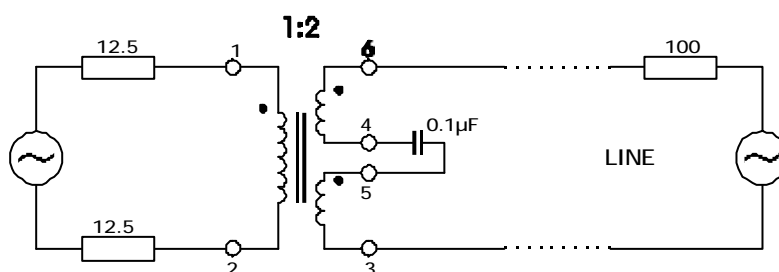
## SPECIFICATIONS

### Electrical

At T = 25°C and reference circuit Fig. 1 unless otherwise stated. The convention used in this datasheet is that 'primary' windings are on the line side and 'secondary' windings are on the equipment side.

Parameter	Conditions	Min	Typ	Max	Units	
Turns ratio	(3-5)+(4-6):(2:1)	1.96	2.00	2.04		
Primary inductance	3-6, 30kHz, 1V	25	40	-	mH	
DC resistance	3-5 and 4-6	-	1.8	-	Ω	
	1-2	-	0.5	-	Ω	
Interwinding capacitance	1 & 2 linked:	-	30	-	pF	
	3, 4, 5, 6 linked	-	-	-	-	
Leakage inductance	3-6 (1-2 shorted)	-	5	12	μH	
Insertion loss	500kHz (corrected for ratio)	-	0.25	-	dB	
Frequency response	30kHz - 1.1MHz	-	±0.15	-	dB	
Phase response	30kHz - 1.1MHz	-	±8	-	degrees	
Longitudinal balance	30kHz - 1.1MHz	46	-	-	dB	
Return loss	30kHz - 500kHz	16	-	-	dB	
	500kHz - 1.1MHz	-	14	-	dB	
	1.1MHz - 2MHz	-	12	-	dB	
Total Harmonic Distortion	4Vrms	-	-	-80	dBc	
	30kHz - 1.1MHz	-	-	-	-	
Voltage isolation	50Hz	2.12	-	-	kVrms	
	DC	3.0	-	-	kV	
Operating range:	Ambient temperature	-	-	-	-	
		Functional	0	-	+70	°C
		Storage	-40	-	+125	°C

**Fig. 1 Reference Circuit**

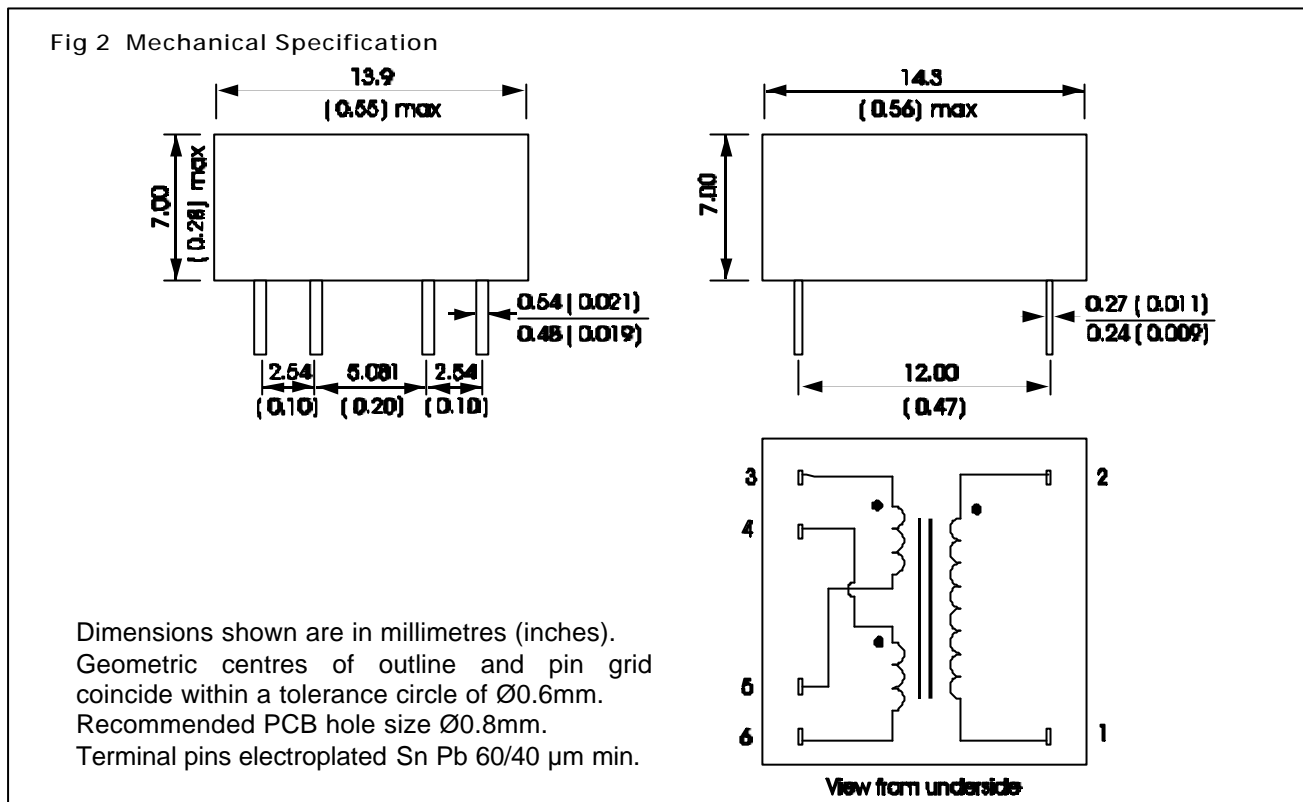


**P2884**

**Note:**

The 0.1μF capacitor is fitted to block DC. It may be placed, as an alternative, in either leg of the line pair.

## CONSTRUCTION



## SAFETY

Constructed in accordance with IEC 950:1991, EN 60950:1992 (BS 7002:1992), supplementary insulation and BS EN 41003:1997, 250Vrms working.

## ABSOLUTE MAXIMUM RATINGS

(Ratings of components independent of circuit).

Short term isolation voltage (1s)	2.12kVrms 3.0kVDC
Storage temperature	-40°C to +125°C
Lead temperature, 10s	260°C

**CERTIFICATION**

Certified by BSI to IEC 950:1991/A4:1996 (IECCB Test Certificate No. GB541W) sub-clauses 2.2.2, 2.9.2, 2.9.3, 2.9.4, 2.9.6, 2.9.7, 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 +70°C in Pollution Degree 3 environment, supplementary insulation.

CAN/CSA C22.2 No. 950-95/UL1950, certified by CSA, 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.

CSA Certificate of Compliance 1107696 (Master Contract 188107).  
Certified by BABT to EN 60950.  
BABT Certificate CR/0160.

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.

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