

PICK-OFF TRANSFORMER

P2152

Features

- * 12.6mm (0.5") seated height
- * Vacuum encapsulated
- * IEC 950, UL 1950 and EN 60950 certified
- * UL Recognized Component
- * BAPT Certificate of Recognition
- * CSA NRTL/C Certificate of Compliance

Applications

- * Telecommunications
- * Pick-off applications
- * Calling Line Identification
- * Instrumentation
- * Voice Recording

DESCRIPTION

P2152 is a high impedance transformer for applications where high performance and safety isolation are required in a compact case size.

P2152 has a turns ratio of 1.732:1 giving an impedance transformation of 3:1.

P2152 is designed for "listening" applications when placed across a line, presenting a very high impedance (>50kΩ) to minimize circuit loading.

P2152 is certified to IEC 950, EN 60950, UL1950 and EN 41003. P2152 is a UL Recognized Component and is supported by a BAPT Certificate of Recognition, a CSA Certificate of Compliance and an IEC CB Test Certificate.



to Electronic Techniques
(Anglia) Limited

SPECIFICATIONS

Electrical

At T = 25°C unless otherwise stated.

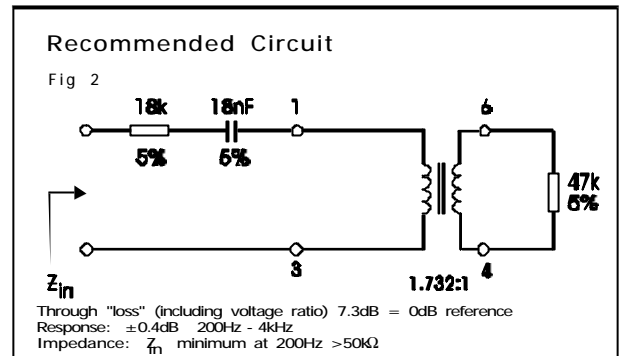
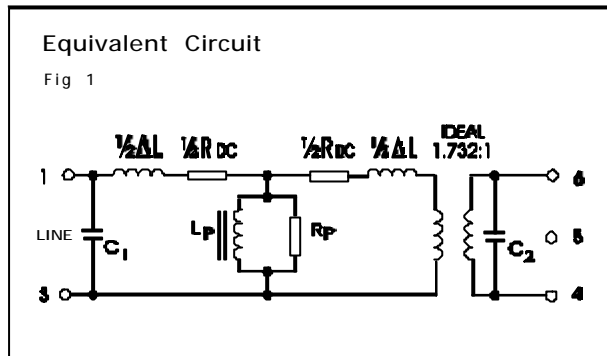
Parameter	Conditions	Min	Typ	Max	Units
Voltage isolation ⁽¹⁾	50Hz	3.88	-	-	kVrms
	DC	5.5	-	-	kV
Balance	DC – 5kHz Method TG25	50	-	-	dB
Input impedance	200Hz – 4kHz, Fig 2	50	-	-	kΩ
Operating range:	Ambient temperature				
Functional		-10	-	+70	°C
Storage		-40	-	+125	°C
Humidity		-	-	95	%R.H.

Lumped equivalent circuit parameters as Fig. 1

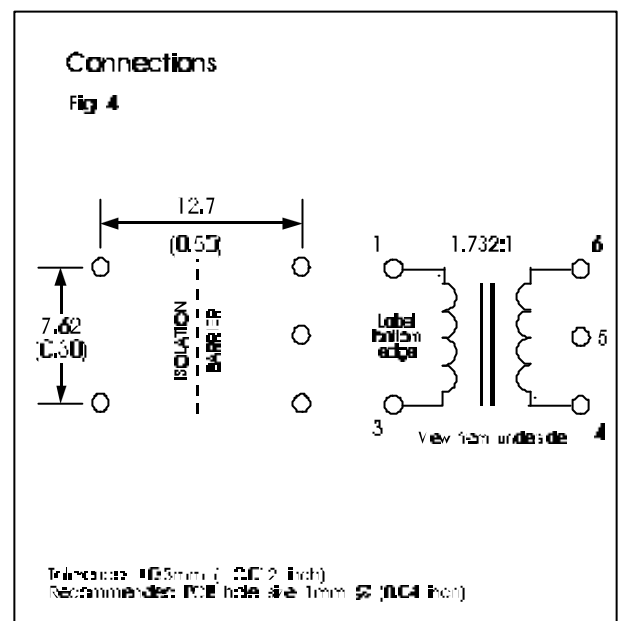
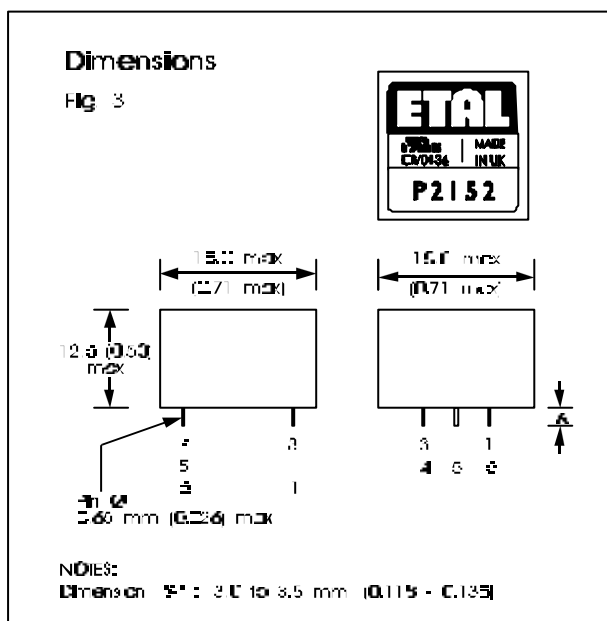
DC resistance, R_{DC} ⁽²⁾	Sum of windings (Corrected for ratio)	2300	-	2800	Ω
Leakage inductance ΔL	Referred to pins 1-3	310	-	350	mH
Shunt inductance L_p	-43dBm 200Hz	60	-	112	H
Shunt loss R_p	-43dBm 200Hz	85	-	120	kΩ
Self Capacitance	C_1	7	-	10	pF
	C_2	13	-	18	pF

Notes

1. Components are 100% tested at 6.5kV DC.
2. Caution: do not pass DC through windings. Telephone line current, etc. must be diverted using choke or semiconductor line hold circuit.



CONSTRUCTION



Dimensions shown are in millimetres (inches).
Geometric centres of outline and pin grid coincide within a tolerance circle of 0.6mm

SAFETY

Constructed in accordance with IEC 950:1991, EN60950:1992 (BS7002:1992) to amendment 5, supplementary insulation, and UL 1950 3rd Edition, reinforced insulation, 250Vrms maximum working voltage, flammability class V-0.

Distances through solid insulation 0.4mm minimum.

CERTIFICATION

Certified under the IEC CB scheme (Certificate GB442W) to IEC 950:1991, up to amendment 4, 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, 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 2 environments, supplementary insulation.

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, reinforced insulation.

UL File number E203175.

CSA Certificate of Compliance 1107696 (Master Contract 1188107).

Approved and certified by BABT to EN 60950 and EN 41003.

BABT Certificate of Recognition CR/0136.

Additionally, Profec Technologies certifies all transformers as providing voltage isolation of 3.88kVrms, 5.5kV DC minimum. All shipments are supported by a certificate of conformity to current applicable safety standards.

ABSOLUTE MAXIMUM RATINGS

(Ratings of components independent of circuit).

Short term isolation voltage (15s) 4.6kVrms,
6.5kV DC

DC current 100µA

Storage temperature -40°C to
+125°C

Lead temperature, 10s 260°C

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ISO 9001
FM 25326

Profec Technologies Ltd., 10 Betts Avenue, Martlesham Heath, Ipswich, IP5 3RH, England

Telephone: +44 (0) 1473 611422

Websites: www.etal.ltd.uk

Email: info@etal.ltd.uk

Fax: +44 (0) 1473 611919

www.profec.com

sales@profec.com