

PRODUCT DATA SHEET

PICK-OFF TRANSFORMER

8002

Features

- * 12.6mm (0.5") seated height
- * Lead-free (Pb-free)
- * RoHS compliant
- * Vacuum encapsulated
- * IEC 60950 and UL 60950 certified
- * UL Recognized Component

Applications

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

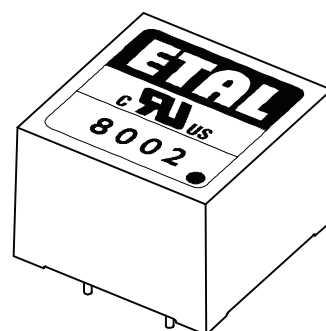
DESCRIPTION

8002 is a high impedance transformer for applications where high performance and safety isolation are required in a compact case size.

8002 has a turns ratio of 1.732:1 giving an impedance transformation of 3:1.

8002 is designed for "listening" applications when placed across a line, presenting a very high impedance (>50kΩ) to minimize circuit loading.

8002 is certified to IEC 60950 and UL 60950. 8002 is a UL Recognized Component and is supported by an IEC CB Test Certificate. The part is completely lead-free, compliant with RoHS Directive 2002/95/EC, and suitable for lead-free and conventional processing.



SPECIFICATIONS

Electrical

At T = 25 °C unless otherwise stated.

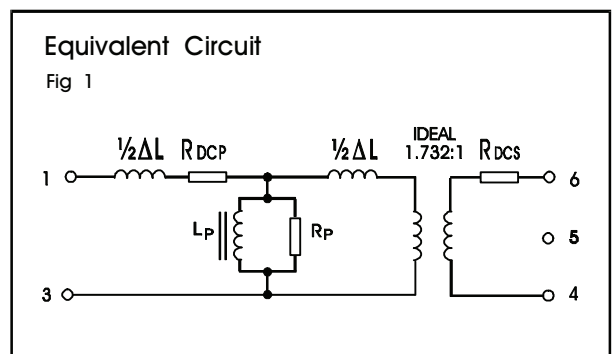
Parameter	Conditions	Min	Typ	Max	Units
Voltage isolation ⁽¹⁾	50Hz	3.88	-	-	kVrms
	DC	5.5	-	-	kV
Balance	DC – 5kHz Method TG25	50	-	-	dB
Input impedance	200Hz – 4kHz	50	-	-	kΩ
Operating range: Functional Storage Humidity	Ambient temperature	0	-	+70	°C
		-40	-	+125	°C
		-	-	95	%R.H.

Lumped equivalent circuit parameters as Fig. 1

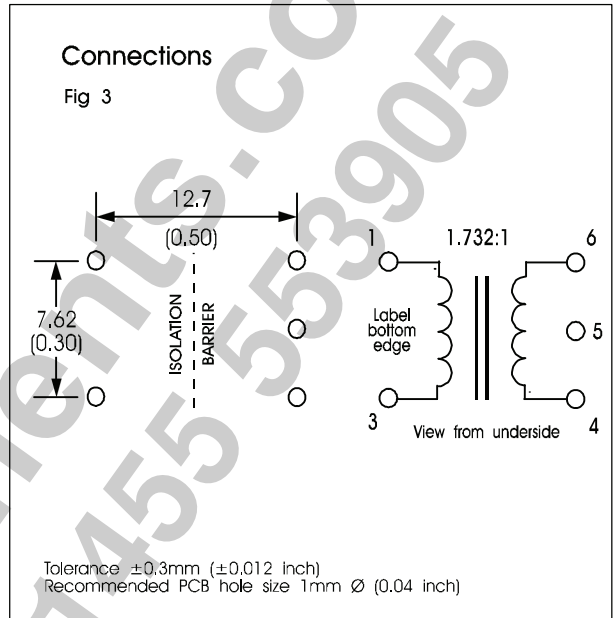
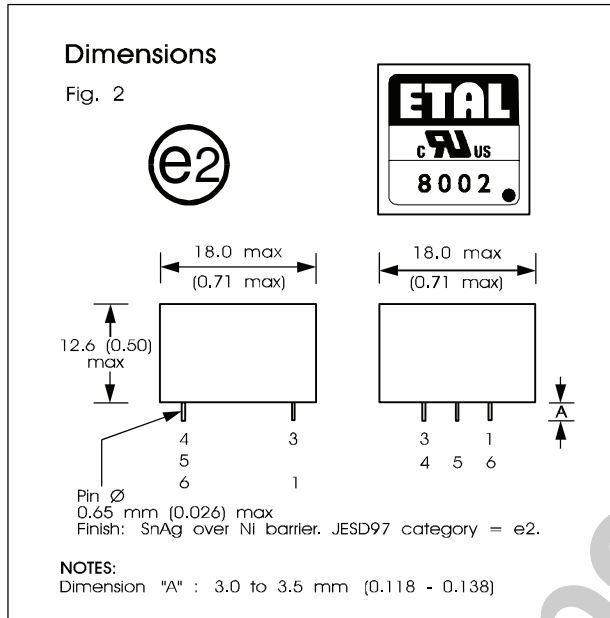
DC resistance, ⁽²⁾	Primary resistance R _{DCP}	773	859	945	Ω
	Secondary resistance R _{DCS}	267	297	327	Ω
Leakage inductance ΔL	Pins 1-3; link 4-6	-	-	190	mH
Shunt inductance L _p	250mV 200Hz	24	140	-	H
Shunt loss R _p	250mV 200Hz	15	230	-	kΩ

Notes

- Components are 100% tested at 6.5kV DC.
- 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 60950-1:2005, Second 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 DK-15467) to IEC 60950-1:2005 sub-clauses 1.5, 1.7, 2.9, 2.10, 4.7 and 5.2 (Denmark, Finland, Germany, Norway, Ireland, Korea, Spain, Sweden, Switzerland, USA, Canada and UK national deviations) for a maximum working voltage of 250Vrms, nominal mains supply voltage not exceeding 250Vrms and a maximum operating temperature of +70°C in Pollution Degree 2 environment, reinforced insulation.

Recognized under the Component Recognition Program of Underwriters Laboratories Inc. to US and Canadian requirements CSA C22.2 No. 60950-1/UL60950-1, Second Edition, based on IEC 60950-1, Second Edition, maximum working voltage 250Vrms, Pollution Degree 2, reinforced insulation.

UL File number E203175.

Additionally, ETAL 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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