

PICK-OFF TRANSFORMER

8002

Features

- * 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

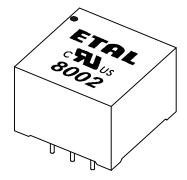
8002 is a high impedance transformer for applications where high performance and safety isolation are required in a compact case size.

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 (typically $50k\Omega$) 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 = $25 \,^{\circ}$ C unless otherwise stated.

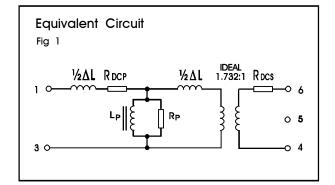
Parameter	Conditions	Min	Тур	Max	Units
Voltage isolation ⁽¹⁾		3.0	-	-	kVrms
Input impedance	200Hz – 4kHz	31	-	-	kΩ
Operating range: Functional Storage Humidity	Ambient temperature	0 -25 -	- -	+70 +85 95	င့ ငွ %R.H.

Lumped equivalent circuit parameters as Fig. 1

DC resistance, ⁽²⁾	Primary resistance R_{DCP} Secondary resistance R_{DCS}	773 267	859 297	945 327	Ω Ω
Leakage inductance ΔL	Pins 1-3; link 4-6	-	-	190	mH
Shunt inductance Lp	250mV 200Hz	24	-	-	н
Shunt loss Rp	250mV 200Hz	15	-	-	kΩ

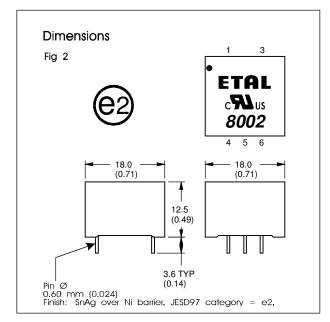
Notes

- 1. Components are 100% tested at 4.7kV DC.
- Caution: do not pass DC through windings. Telephone line current, etc. must be diverted using choke or semiconductor line hold circuit.

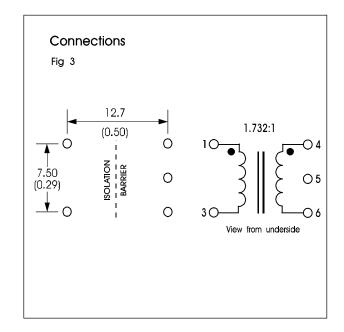




CONSTRUCTION



Dimensions shown are in millimetres (inches). Tolerance ± 0.25 (0.01).





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-15488) to IEC 60950-1:2005 sub-clauses 1.5, 1.7, 2.9, 2.10, 4.7, 5.1 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 E171368.

Additionally, 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)	3.0kVrms, 4.3kV DC
DC current	100µA
Storage temperature	-40 ℃ to +125 ℃
Lead temperature, 10s	260 <i>°</i> C

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