

'Power across barrier' Transformer

P1682

Features

- Industry Standard
- 12.6mm Seated height
- Conforms to EN 60065:2002
- Tested to 6.5kV DC isolation

Application

- High isolation power across PSTN barrier transformer

Description

Modem design occasionally requires the transfer of small amounts of power across the safety barrier. P1682 is designed for such a function. Simple circuitry, powered from a 5V supply and using P1682, can provide up to 270mW of DC isolated to the full standard required by BS 6301. At only 12.6mm high,

P1682 is significantly lower than most other similar transformers and meets the highest international safety standards, being vacuum encapsulated and 100% tested to withstand 6.5kV DC (4.60kV rms). P1682 is certified to BS 415, EN 60065:2002, and IEC 65:1985 with amendments 1, 2 and 3 sub-clause 14.3.2

Specifications

Parameter	Conditions	Min	Typical	Max	Units
Switching frequency	5V DC	5		12	kHz
Shunt inductance	10kHz 10mV Pins 1 - 3	5.70			mH
Shunt loss	10kHz 10mV	110			kΩ
Leakage inductance	10kHz 10mV Pins 1 - 3			380	μH
DC Resistance	Pins 1 - 3 Pins 4 - 6			1.5 26.0	Ω Ω
Saturation	Excitation 50Hz, 250V rms. Output voltage across line			10 65	V rms V peak
Voltage isolation	50Hz DC	3.88 5.5			kV rms kV
Operating range	Ambient temperature				
Functional		-10		+80	°C
Storage		-40		+125	°C
Humidity				95	%R.H.

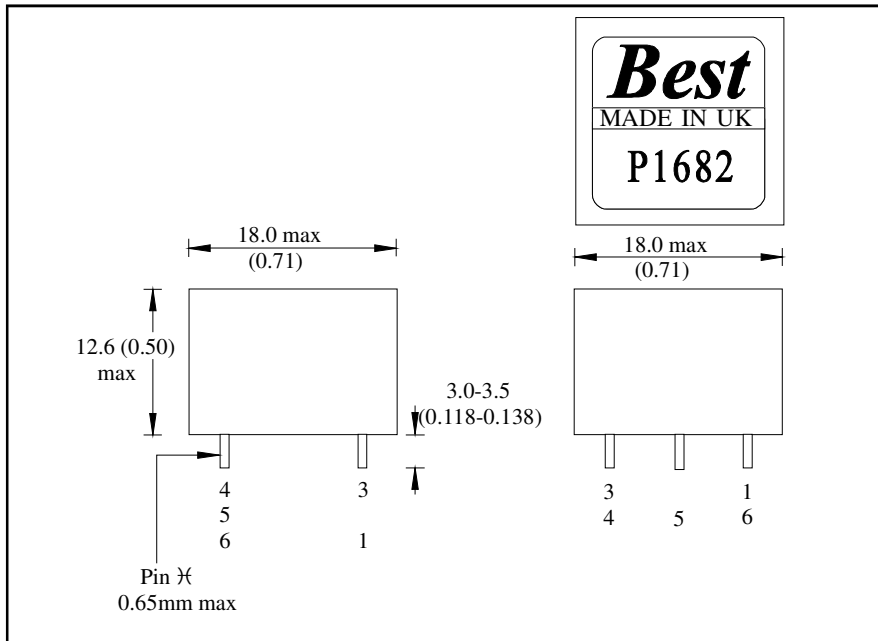
Best
Windings Ltd

www.bestwindings.co.uk

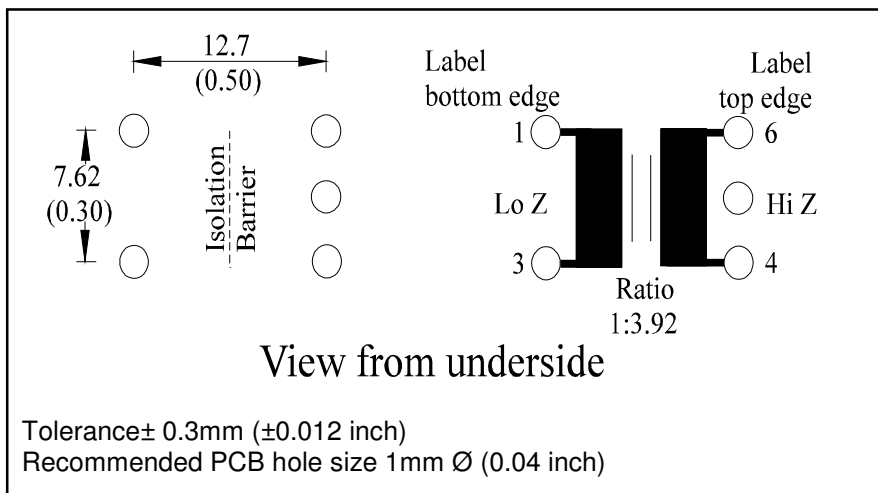
Best Windings Ltd, Viking Works,
Bucklesham Road, Kirton, Ipswich,
Suffolk, England. IP10 0NX
E-Mail: sales@bestwindings.co.uk
Tel: +44 (0)1394 448 424
Fax: +44(0)1394 448 430

P1682

Dimensions



Connections



Information

Construction

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

Safety

Constructed in accordance with IEC 60950-1, EN60950-1, supplementary insulation, and UL 60950-1, reinforced insulation, 250Vrms maximum working voltage, flammability class V-0. Distances through solid insulation 0.4mm minimum.

Absolute Maximum Ratings

(Ratings of components independent of circuit)
Short term isolation voltage (15s)
4.6kV rms, 6.5kV DC

Storage temperature
-40°C to +125°C

Lead Temperature, 10s
260°C

Best
Windings Ltd

www.bestwindings.co.uk

©2007 The product reference numbers used are the trademarks of Best Windings Ltd.

November 2007

Best Windings Ltd, Viking Works,
Bucklesham Road, Kirton, Ipswich,
Suffolk, England. IP10 0NX
E-Mail: sales@bestwindings.co.uk
Tel: +44 (0)1394 448 424
Fax: +44(0)1394 448 430