

## Features

- Industry Standard
- 14.5mm Seated height
- Vacuum encapsulated
- Compliant with IEC 60950-1
- Tested to 6.5kV DC isolation

## Application

- Telecommunications
- Data over mains
- Line matching
- Instrumentation

## Description

P1207 is the transformer of choice in medium-speed applications where high performance coupled with high isolation is required at a most competitive price. At only 14.5mm high, P1207 meets the highest international safety standards, being vacuum encapsulated and 100% tested to withstand 6.5kV DC (4.60kV rms). P1207 is designed for data

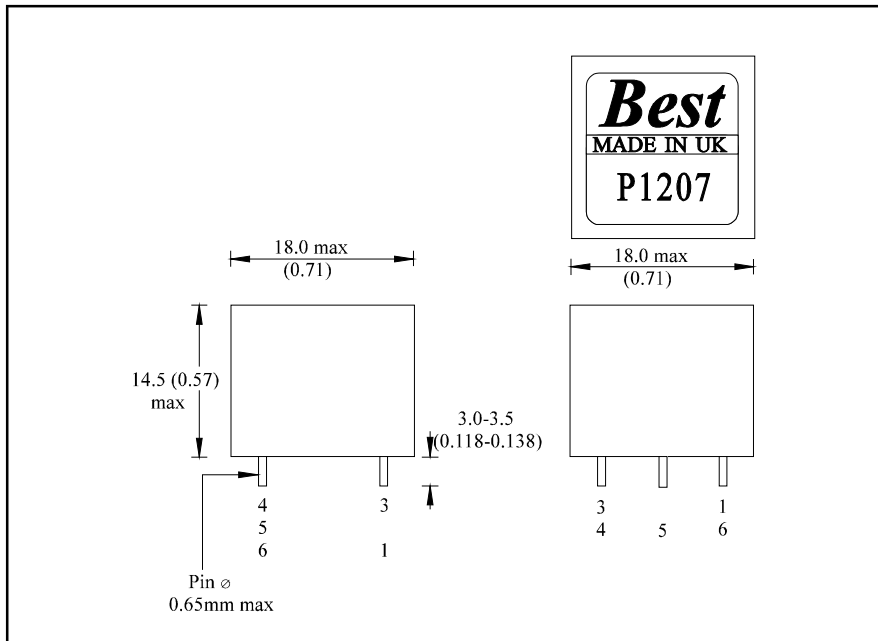
communications over 230 V mains supplies, at frequencies up to 120 kHz. It is intended to provide a match between very low values (e.g, power supply mains used as a signal carrier) and impedances which are more convenient for filtering and connection to signal processing circuits. For practical purposes the impedance level at pins 4-6 should be taken as 1k $\Omega$

## Specifications

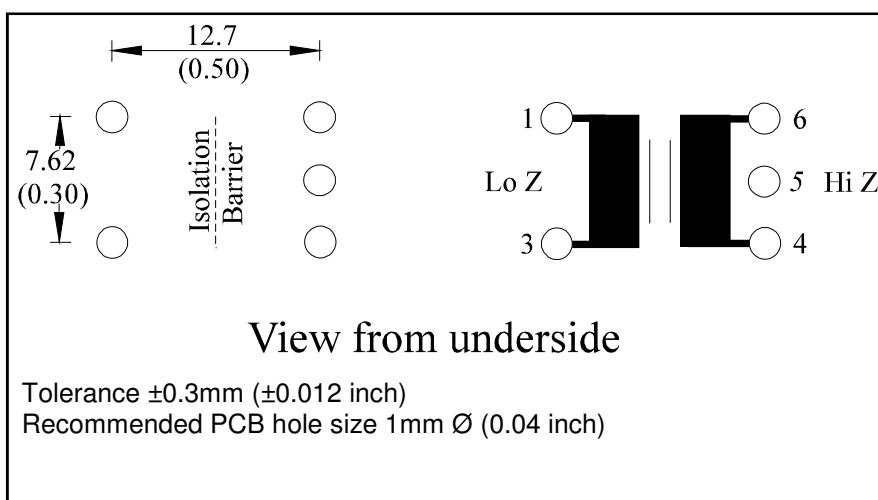
Parameter	Conditions	Min	Typical	Max	Units
Shunt inductance*	Pins 1 - 3 1kHz 100mV	150			mH
Leakage inductance	Pins 4 - 6 1 - 30kHz	17		21	mH
DC Resistance	Pins 1 - 3 Pins 4 - 6	2.1 62		2.9 75	$\Omega$ $\Omega$
Turns ratio	Pins 1-3 / 4-6		1 : 5.6		
Saturation	Excitation 50Hz, 250V rms Output Voltage 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		+70	$^{\circ}$ C
Storage		-40		+125	$^{\circ}$ C
Humidity				95	%R.H.

\*N.B. Shunt inductance is sensitive to frequency and level but at 120kHz the net shunt impedance at pins 4-6 is

## 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

DC current  
100mA

Storage temperature  
-40°C to +125°C

Lead Temperature, 10s  
260°C

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