

## Features

- Microprofile 7mm
- Vacuum encapsulated
- Compliant with IEC 60950-1
- Tested to 6.5kV DC isolation

## Application

- 62Ω Line Driving

## Description

The P2697 is a microprofile transformer for 62Ω line driving applications where high-voltage isolation is required. It features fully vacuum encapsulated construction using materials conforming to UL94V-0 flammability requirements.

## Specifications

Parameter	Conditions	Min	Typical	Max	Units
Insertion loss	f=2kHz R <sub>L</sub> =62Ω		3.0		dB
Frequency Response	200Hz - 4kHz			± 0.2	dB
Distortion <sup>(1)(3)</sup>	f=600Hz 0-775mV rms in line, THD			1	%
Balance	DC - 5kHz Method TG25	80			dB
DC Resistance	Sum of windings	20		26	Ω
Saturation <sup>(3)</sup>	Excitation 50Hz, 250V rms Output Voltage across line			10 65	V rms V peak
Voltage Isolation <sup>(2)</sup>	50Hz DC	3.88 5.5			kV rms kV
Operating range	Ambient temperature				
Functional		-25		+85	°C
Storage		-40		+125	°C
Humidity				95	%R.H.

### Notes:

(1) Third harmonic typically exceeds other harmonics by 20 dB

(2) Components are 100% Tested at 6.5 kV DC

(3) To avoid saturation, do not drive signals into 62Ω line at levels greater than

$$V_{\text{rms}} = 1.3f,$$

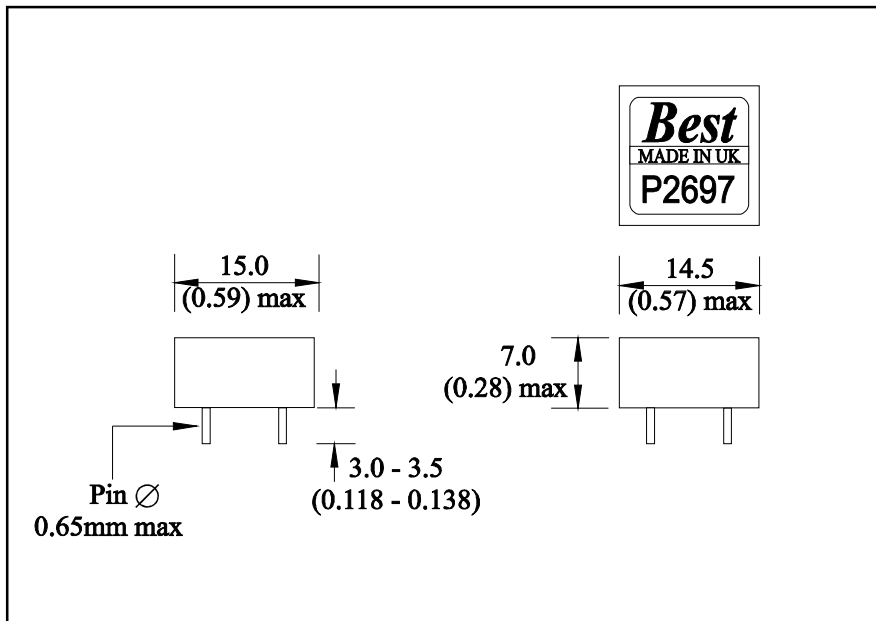
where f is frequency in kHz.

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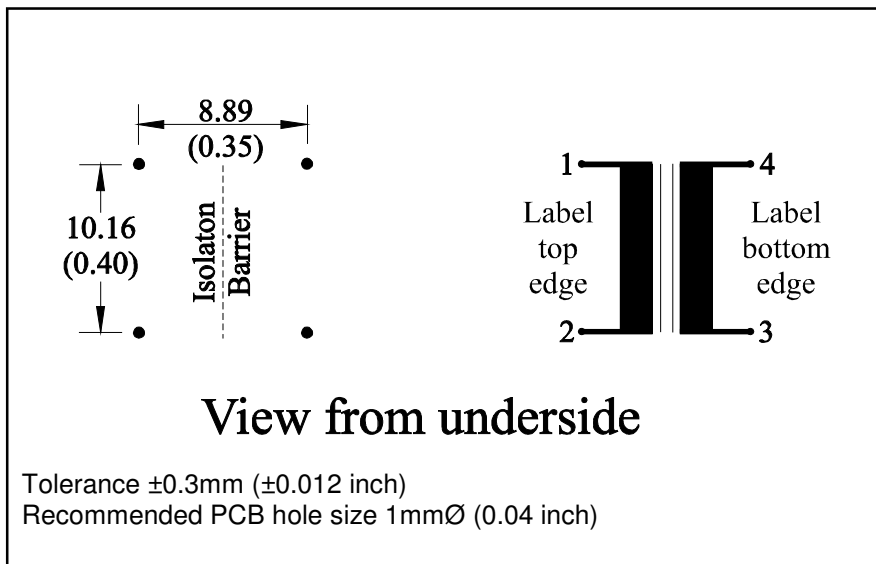
[www.bestwindings.co.uk](http://www.bestwindings.co.uk)

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## Dimensions



## Connections



## Information

### Construction

Dimensions are shown in millimetres (inches).  
Geometric centres of outline and pin grid coincide within a tolerance circle of  $0.6\text{mm}\varnothing$ .  
Windings may be used interchangeably as primary or secondary.  
N.B Isolaton barrier cuts  $8.89\text{mm}$  dimension

### 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  $0.4\text{mm}$  minimum.

### Absolute Maximum Ratings

(Ratings of components independent of circuit)

Short term isolation voltage (15s)  
 $4.6\text{kV rms}$ ,  $6.5\text{kV DC}$

DC current -  $100\mu\text{A}$

Storage temperature -  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$

Lead Temperature, 10s -  $260^\circ\text{C}$

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