

Features

- 11mm Seated height
- Vacuum encapsulated
- High impedance line shunt
- 6500V isolation

Application

- Line driving
- Impedance matching
- Instrumentation
- Step up/down with isolation

Description

The P2647 is a miniature drive transformer for applications where safety-critical isolation is required. It features fully vacuum encapsulated construction using materials conforming to UL94V-0 flammability requirements.

The P2647 permits a double-terminated 600Ω line to be driven at high power levels while presenting a very

high shunt impedance across the line. In the current driven mode, a drive level of 15V pk-pk across the line is attainable from a single 5V supply, whilst preserving the requirement for negligible loading.

Specifications

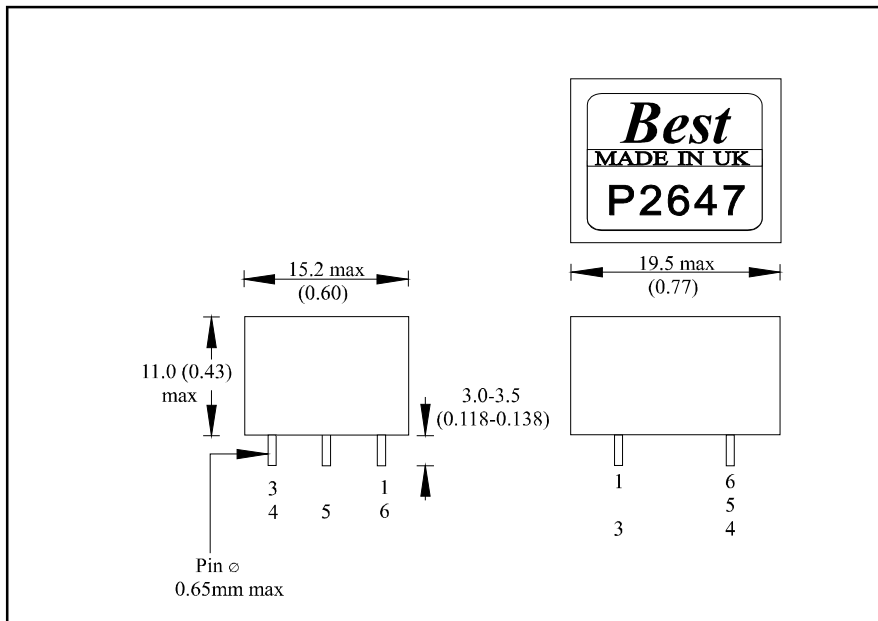
Parameter	Conditions	Min	Typical	Max	Units
Frequency response	100 Hz - 10 kHz			±0.1	dB
	200 Hz - 3 kHz			±1.0	dB
Shunt Impedance	300 Hz - 3.4 kHz	30			kΩ
Distortion	f=450 Hz 0dBm/600 in line, 3rd Harmonic		-60		dBm
Balance	DC - 5 kHz Method TG25	80			dB
Line Loading	f≈200 Hz	20	50		kΩ
Saturation	Excitation 50 Hz 250 V rms Output voltage Across line			10	Vrms
				65	V peak
Voltage Isolation	50Hz	3.88			kV rms
	DC	5.5			kV
Operating range	Ambient temperature				
Functional		0		+70	°C
Storage		-40		+125	°C
Humidity				95	%R.H.

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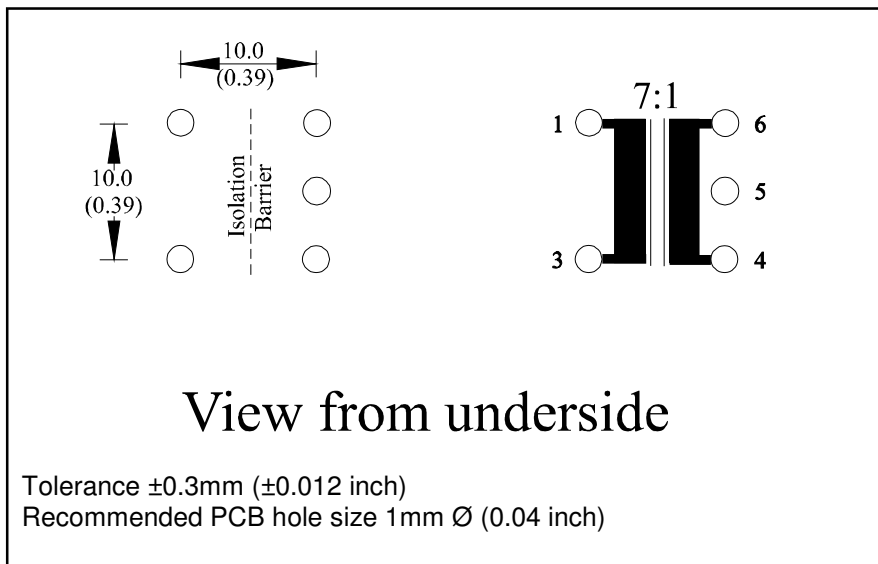
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Dimensions



Connections



Information

Construction

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

Continuous isolation voltage
 3000V

Short term isolation voltage (15s)
 6500V rms

DC Current
 100 μ A

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

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

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