

**Features**

- Industry Standard
- Low profile
- BS 6305 match compatible
- High reliability under adverse line transient conditions

**Application**

- Telecommunications
- V.22 bis modems
- Instrumentation
- Fax/modems
- Portable computers

**Description**

P1419 is a choke designed for application to standard 600Ω PSTN line terminations in cases where the height available is limited. It is designed for use with line transformer P1200 and has a low maximum seated height of only 19mm. Other transformers may be used but they may require different component values. P1419 is very similar to P1402 except for being somewhat larger, but its cost in production is about half that of P1402. The P1419 is designed with BS 6301 para. 4.4 in mind, which specifies certain overvoltage tests, and is therefore constructed using materials having

adequate margins. Under conditions of very poor ventilation the overvoltage test causes a winding temperature rise of 117°C. Under normal worst-case conditions the rise is 79°C after 2 hours continuous line hold. Choke P1419 can easily be arranged to meet BS 6305 Class (a). In view of this there is no point in considering Class (b) further in these notes although Class (b) can be met with a wide safety margin except for the restriction on modem line terminal impedance. P1419 is ideal in situations where lightning strikes make semiconductors vulnerable.

**Specifications**

Parameter	Conditions	Min	Typical	Max	Units
Insertion loss	N/A due to nature of terminations				
Frequency response	+3dB max tilt	200		4000	Hz
Return loss	200Hz - 4kHz	18			dB
Distortion	2nd harmonic (DC-0 to 85mA)			74	dBm
	3rd harmonic(DC-0 to 85mA)			60	dBm
Balance	DC >5kHz Method TG25	80			dB
Shunt inductance	200 Hz -40dBm	0.7			H
Shunt loss R	200 Hz -40dBm	3.5			kΩ
DC resistance	20°C	185		200	Ω

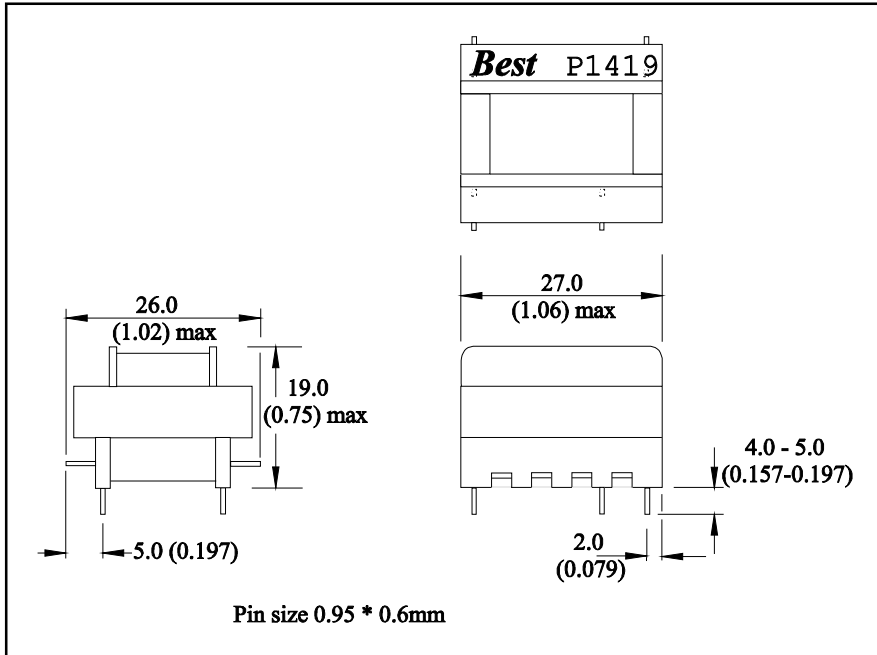
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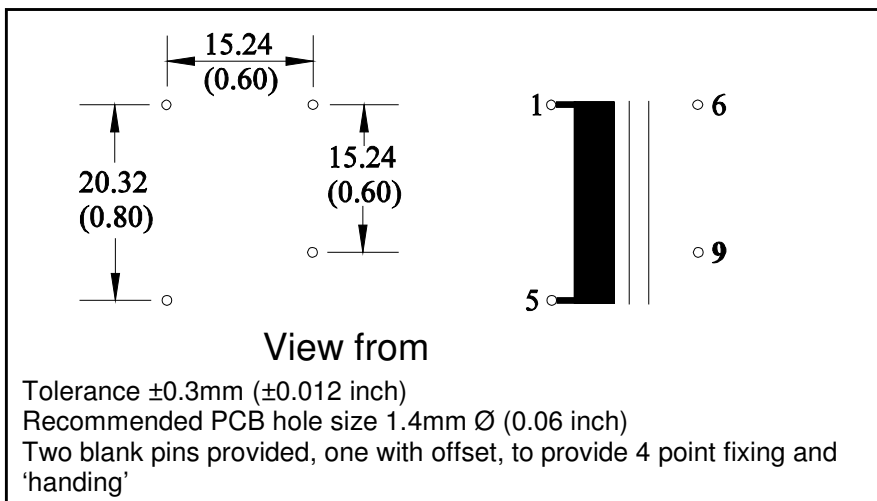
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# P1419

## Dimensions



## Connections



## Information

### Construction

Dimensions are shown in millimetres (inches).  
Open frame having the core bonded by epoxy resin.

### Absolute Maximum Ratings

(Ratings of components independent of circuit)

DC current

85mA (meets inductance claim)

DC current

120 mA (endurance)

Storage temperature

-40°C to +125°C

Lead temperature, 10s

260°C

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