

4-220 V TEST PROBE

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Using inexpensive components, you can fit a simple probe circuit into a pencil-sized enclosure. When both LEDs are on, the probe indicates the presence of an ac voltage; either LED alone indicates the presence and polarity of a dc voltage. The diode-bridge arrangement allows one-way current source R1, R2, Q1, and Q2 to light either LED (or both) when the probe is activated by a test voltage.

Diodes provide the necessary peak-inverse voltage rating; R3 and C1 provide a spike-suppression network to protect the current-source transistors.