



The diodes D1 to D4 effectively block the DC on the signal as long as it is below the diode Vbe threshold (D1+D4 and D2+D3). For most mains on DC problems, the DC offset is a few hundred mV. See Rod Elliot's website for a discussion on this. Note, in a practical application, you would need to use fast diodes with soft recovery, or use a suitable sized RC network to snubber the inductive kickback of the transformer. In designs using high capacitor values across the diode bridge, you do not need a snubber.