

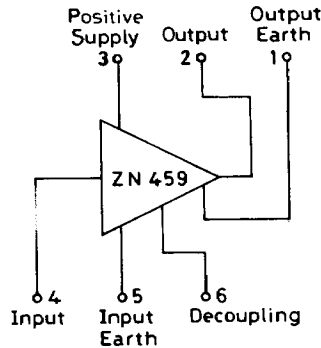
## ULTRA LOW NOISE WIDEBAND AMPLIFIER

## ZN459/ZN459C/ZN459CP

The ZN459 is an ultra low noise amplifier with remarkable noise performance, very high unity gain bandwidth (100 MHz), and small package. This combination makes it exceptionally attractive for low noise applications such as thermal imaging where CMT detectors require multiple channel buffering and other imaging and sonar applications. Commercial applications include industrial low noise applications, Multi-channel amplifiers, tachometers, general audio, etc.

### FEATURES

- Low input noise resistance, 45Ω equivalent or 800 pV per root cycle
- High bandwidth, 15 MHz typical
- High, well controlled gain, 60 dB  $\pm 2$  dB
- Gain variable from 60 dB to 40 dB
- Low supply current, <3 mA from 5V
- 0 to +70°C and -55 to +125°C operation
- Small package, 6 lead TO-71 or 8 lead plastic D.I.L.



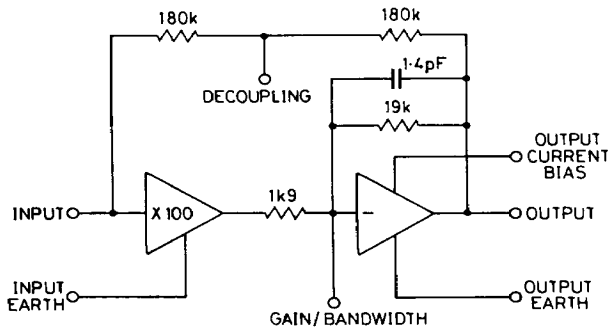
## ULTRA LOW NOISE WIDEBAND PRE-AMPLIFIER

## ZN460/ZN460C/ZN460CP

A versatile high grade a.c. pre-amplifier designed for applications requiring ultra low noise such as infra-red imaging and low noise wide band amplifiers, e.g. microphone, acoustic emission, transducer bridge amplifier. The matching of open loop gain coupled with small physical size make the ZN460 series ideal for multichannel amplification.

### FEATURES

- High Controlled Gain : 60 dB  $\pm 1$  dB typical
- Programmable gain : 50-60 dB typical
- Low Noise : 40Ω Equivalent Noise Resistance, or 800 pV/ $\sqrt{\text{Hz}}$
- Programmable Bandwidth : Up to 6 MHz
- Low Supply Current : <3 mA from 5V downwards
- 0 to +70°C and -55 to +125°C operation
- Available in 8-lead plastic D.I.L. or 8-lead TO-78



Circuit Diagram