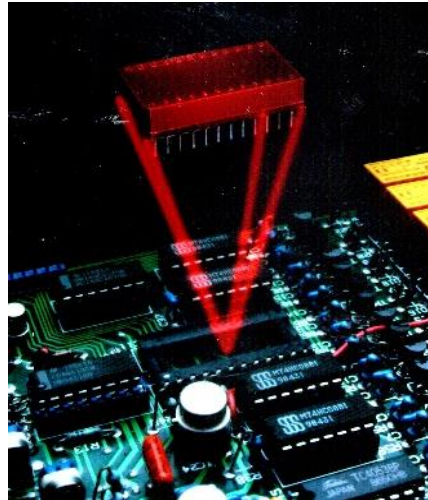


RS 846-171 STRAIN GAUGE AMPLIFIER DATA SHEET



General

This component enables the signals from Strain Gauges to be amplified. It includes the ability to control a negative supply to a bridge in order to minimise common mode interference, the circuitry ensures the negative supply mirrors the positive supply.

The amplifier is to be housed within a 24 pin dual in line package (32 x 24 x 13.5 mm). The unit is sensitive to electrostatic discharge and therefore static handling procedures must be followed.

Electrical

All the specifications below are worse case ratings @ 25°C ±12V supply

Items that are asterixed thus '*' are taken from manufacturers data

Supply Voltage	:* ±2 to ±20 V DC
Supply current	:* 4mA
Input offset voltage	:* 200µV
Input offset voltage/temperature drift	:* 0.5µV/°C
Input offset voltage/supply voltage	:* 3µV/V
Input offset voltage/time	:* 0.3µV/month
Input impedance	:* >15MΩ
Input noise voltage	:* 0.9µV pk-pk
Bandwidth (unity gain)	:* 450 KHz
Output current	: 5mA
Output voltage span (RI=10K)	: ±(Vs-2)V
Closed loop gain (adjustable)	:* 3 to 60,000
Open loop gain	:* >120 dB
Common mode rejection ratio	:* >120 dB
Bridge supply voltage/temperature	: 20µV/°C
Maximum bridge supply current	:* 12mA
Power dissipation	: 0.5W
Warm up time	: 5 minutes
Operating temperature range	:* -25°C to +85°C