μA740 Fet Input Operational Amplifier

GENERAL DESCRIPTION

The μA740 is a high performance monolithic FET-input operational amplifier constructed using the Fairchild Planar epitaxial process. It is intended for a wide range of analog applications where very high input impedance is required and features very low input offset current and very low input bias current. High slew rate, high common mode voltage range and absence of 'latch up' make the μA740 ideal for use as a voltage follower. The high gain and wide range of operating voltages provide superior performance in active filters, integrators, summing amplifiers, sample and holds, transducer anplifiers, and other general feedback applications. The μA740 is short circuit protected and has the same pin configuration as the popular μA741 operational amplifier. No external components for frequency compensation are required as the internal 6 dB/octave roll-off insures stability in closed loop applications.

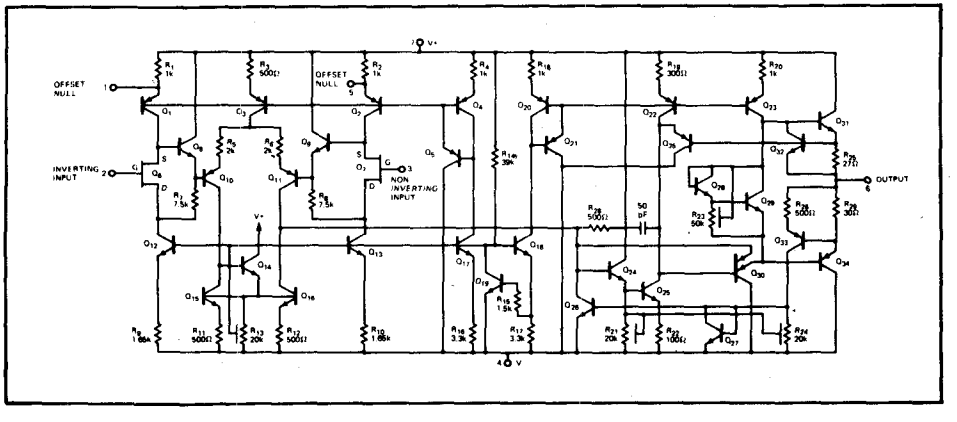
FEATURES

High input impedance 1,000,000MΩ.
No frequency compensation required.
Short-circuit protection.
Offset voltage null capability.
Large common-mode and differential voltage ranges.
No latch up.

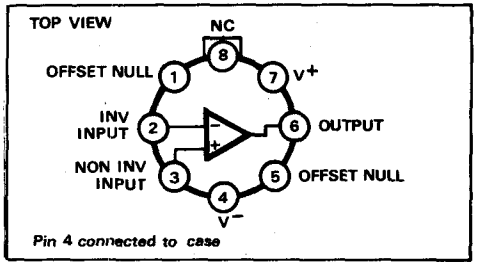
REFERENCE TABLE

Code	Stock No.
740HC	**35824H**

EQUIVALENT CIRCUIT



CONNECTION DIAGRAM



See outline drawing No. 97 for dimensions.

ABSOLUTE MAXIMUM RATINGS

Supply voltage	±22V
Internal power dissipation	500mW
Differential input voltage	±30V
Input voltage	±15V
Voltage between offset null and V+	±0.5V
Storage temperature range	−65°C to +150°C
Operating temperature range	
Commercial (740C)	*0°C to +70°C*
Lead temperature (soldering, 60 seconds)	300°C
Output short circuit duration	Indefinite

7