

LH0022C High Performance FET Op Amp LH0042C Low Cost FET Op Amp LH0052C Precision FET Op Amp

GENERAL DESCRIPTION

The LH0022/LH0042/LH0052 are a family of FET input operational amplifiers with very closely matched input characteristics, very high input impedance, and ultra-low input currents with no compromise in noise, common mode rejection ratio, open loop gain, or slew rate. The internally laser nulled LH0052 offers 200 microvolts maximum offset and $5\mu\text{V}/^\circ\text{C}$ offset drift. Input offset current is less than 100 femtoamps at room temperature and 100pA maximum at 125°C. The LH0022 and LH0042 are not internally nulled but offer comparable matching characteristics. All devices in the family are internally compensated and are free of latch-up and unusual oscillation problems. The devices may be offset nulled with a single 10k trimpot with negligible effect in offset drift or CMRR.

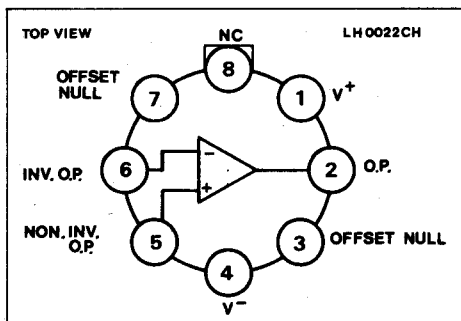
FEATURES

Low input offset current LH0052	100 femtoamps max.
Low input offset drift LH0052	$5\mu\text{V}/^\circ\text{C}$ max.
Low input offset voltage	100 microvolts-typ.
High open loop gain	10dB typ.
Excellent slew rate	$3/0\text{V}/\mu\text{s}$ typ.
Internal 6dB/octave frequency compensation	
Pin compatible with standard IC op amps (TO-5 package)	

ABSOLUTE MAXIMUM RATINGS

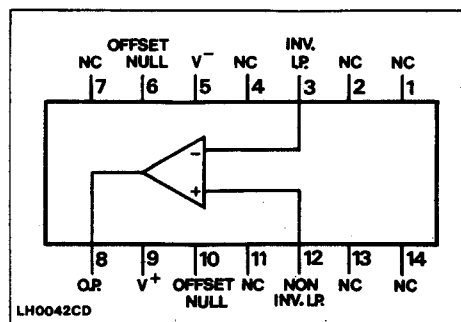
Supply Voltage	$\pm 22\text{V}$
Power Dissipation	500mW
Input Voltage	$\pm 15\text{V}$
Differential Input Voltage	$\pm 30\text{V}$
Voltage Between Offset Null and V^-	$\pm 0.5\text{V}$
Short Circuit Duration	Continuous
Operating Temperature Range LH0022C, LH0042C, LH0052C	-25°C to $+85^\circ\text{C}$
Storage Temperature Range	-65°C to $+150^\circ\text{C}$
Lead Temperature (Soldering, 10 sec)	300°C

CONNECTION DIAGRAM



See outline drawing No 97 for dimensions

CONNECTION DIAGRAM



See outline drawing No 109 for dimensions

REFERENCE TABLE

Code	Stock No.
LH0022CH	31063A
LH0042CH	31064X
LH0042CD	31043R
LH0052CH	34503C

MANUFACTURER'S CURRENT LIST PRICES ARE ALWAYS CHARGED