



## LF351

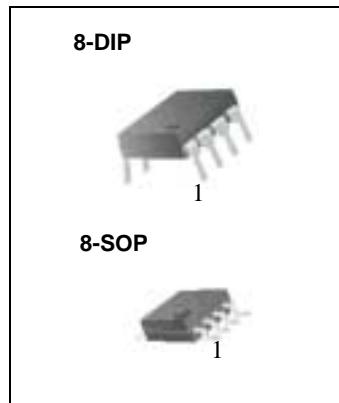
### Single Operational Amplifier (JFET)

#### Features

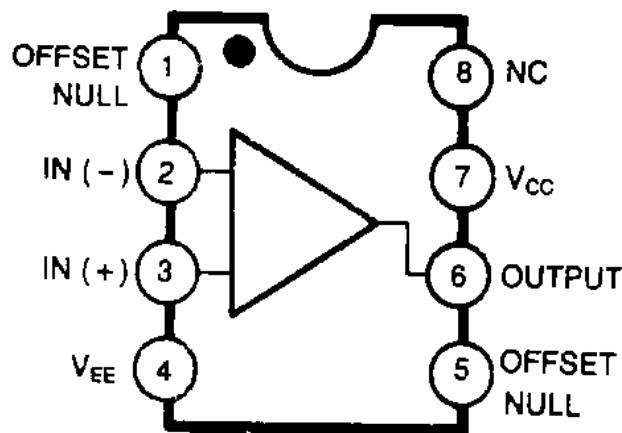
- Internally trimmed offset voltage: 10mV
- Low input bias current : 50pA
- Wide gain bandwidth : 4MHz
- High slew rate : 13V/ $\mu$ s
- High input impedance :  $10^{12}\Omega$

#### Description

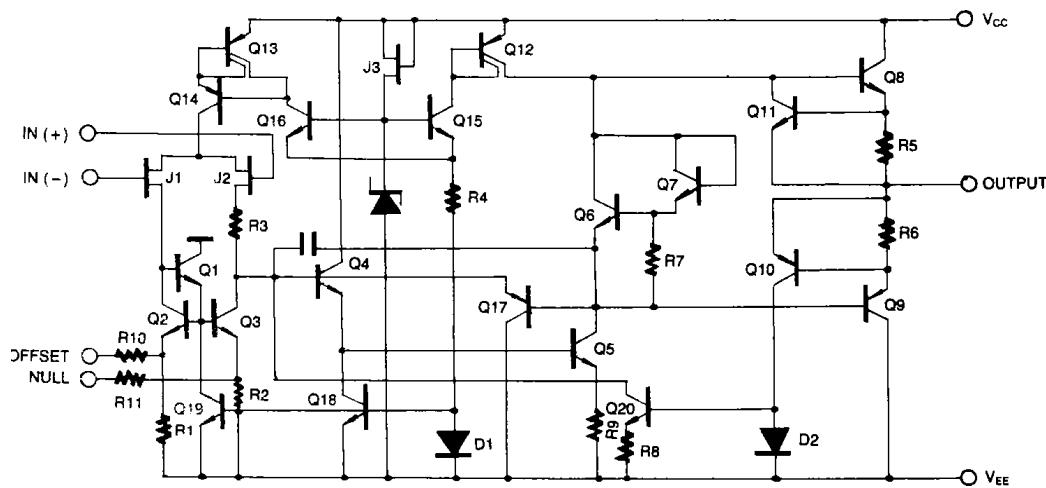
The LF351 is JFET input operational amplifier with an internally compensated input offset voltage. The JFET input device provides wide bandwidth, low input bias currents and offset currents.



#### Internal Block Diagram



## Schematic Diagram



## Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Supply Voltage	V <sub>CC</sub>	±18	V
Differential Input Voltage	V <sub>I(DIFF)</sub>	30	V
Input Voltage Range	V <sub>I</sub>	±15	V
Output Short Circuit Duration	-	Continuous	-
Power Dissipation	P <sub>D</sub>	500	mW
Operating Temperature	T <sub>OPR</sub>	0 ~ +70	°C
Storage Temperature Range	T <sub>STG</sub>	-65 ~ +150	°C

## Electrical Characteristics

(VCC = +15V, VEE = - 15V, TA = 25 °C. unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Input Offset Voltage	V <sub>IO</sub>	R <sub>S</sub> = 10kΩ 0 °C ≤ TA ≤ 70 °C	-	5.0	10	mV
Input Offset Voltage Drift (Note1)	ΔV <sub>IO</sub> /ΔT		-	-	13	
Input Offset Current	I <sub>IO</sub>	0 °C ≤ TA ≤ 70 °C	-	25	100	pA
Input Bias Current	I <sub>BAIS</sub>		-	-	4	nA
Input Resistance (Note1)	R <sub>I</sub>	VO(P-P) = ±10V R <sub>L</sub> = 2kΩ 0 °C ≤ TA ≤ 70 °C	-	50	200	pA
Large Signal Voltage Gain	G <sub>V</sub>		25	100	-	V/mV
Output Voltage Swing	V <sub>O</sub> (P-P)	R <sub>L</sub> = 10kΩ	±12	±13.5	-	V
Input Voltage Range	V <sub>I</sub> (R)		±11	+15 -12	-	V
Common Mode Rejection Ratio	C <sub>CMRR</sub>	R <sub>S</sub> ≤ 10kΩ	70	100	-	dB
Power Supply Rejection Ratio	P <sub>SRR</sub>	R <sub>S</sub> ≤ 10kΩ	70	100	-	dB
Power Supply Current	I <sub>CC</sub>	G <sub>V</sub> = 1	-	2.3	3.4	mA
Slew Rate (Note1)	S <sub>R</sub>		-	13	-	V/μs
Gain-Bandwidth Product (Note1)	G <sub>BW</sub>	-	-	4	-	MHz

## Ordering Information

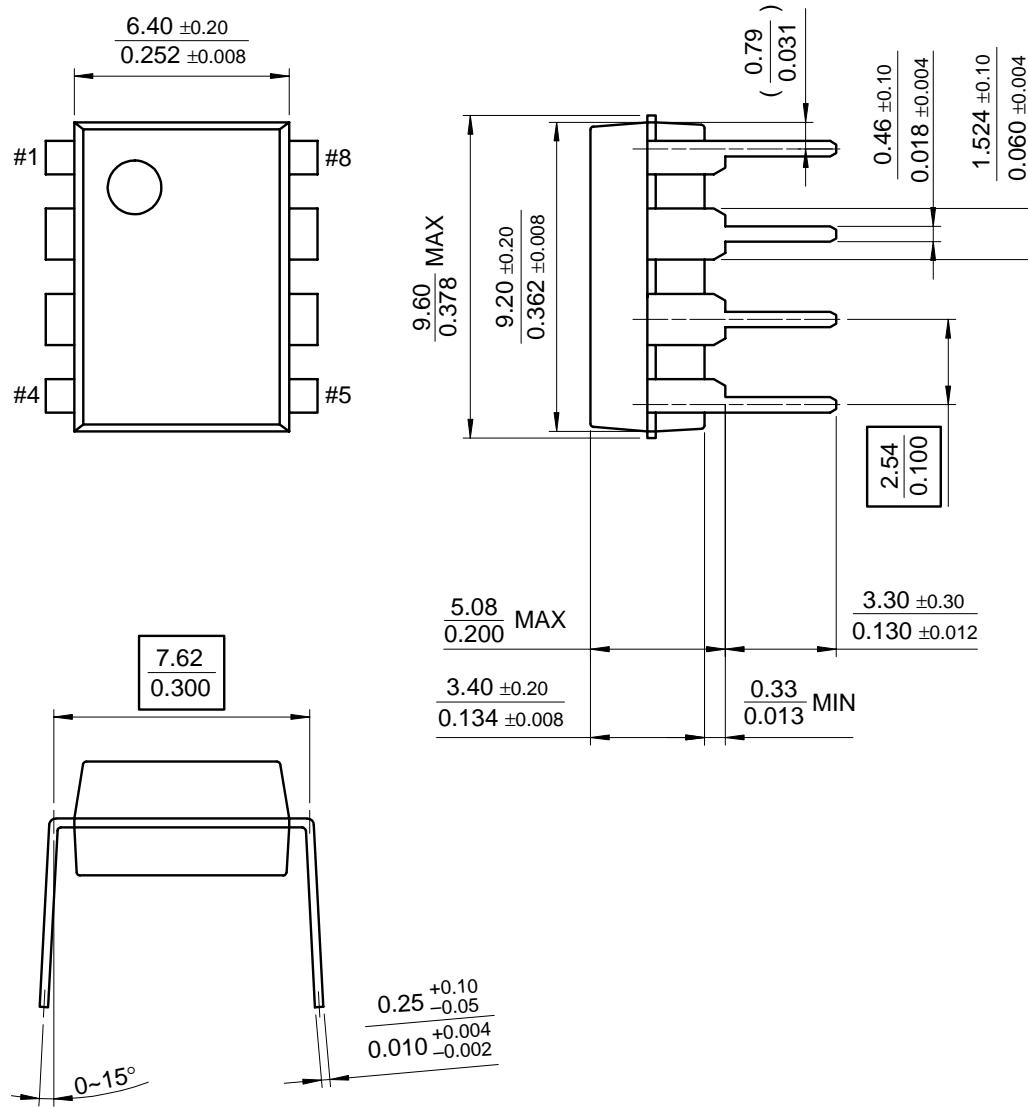
Product Number	Package	Operating Temperature
LF351N	8-DIP	0 ~ + 70°C
LF351M	8-SOP	

## Mechanical Dimensions

### Package

Dimensions in millimeters

### 8-DIP



**Mechanical Dimensions** (Continued)**Package****Dimensions in millimeters****8-SOP**