

LF351

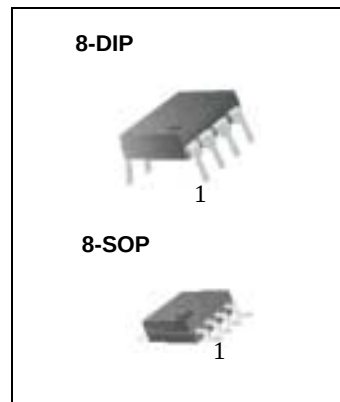
Single Operational Amplifier (JFET)

Features

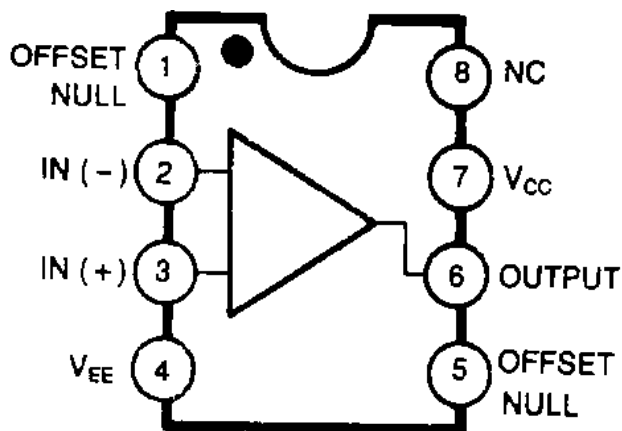
- Internally trimmed offset voltage: 10mV
- Low input bias current : 50pA
- Wide gain bandwidth : 4MHz
- High slew rate : 13V/μs
- High input impedance : $10^{12}\Omega$

Description

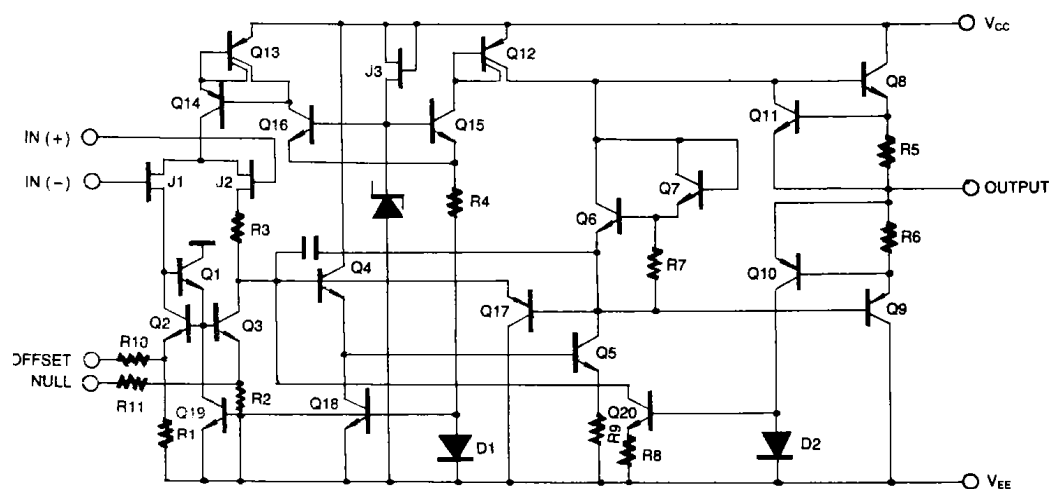
The LF351 is JFET input operational amplifier with an internally compensated input offset voltage. The JFET input device provides wide bandwidth, low input bias currents and offset currents.



Internal Block Diagram



Schematic Diagram



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Supply Voltage	V _{CC}	±18	V
Differential Input Voltage	V _{I(DIFF)}	30	V
Input Voltage Range	V _I	±15	V
Output Short Circuit Duration	-	Continuous	-
Power Dissipation	P _D	500	mW
Operating Temperature	T _{OPR}	0 ~ +70	°C
Storage Temperature Range	T _{STG}	-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 _{IO}	RS = 10kΩ	-	5.0	10	mV	
		0 °C≤TA≤70 °C	-	-	13		
Input Offset Voltage Drift (Note1)	ΔV _{IO} /ΔT	RS = 10kΩ	0 °C≤TA≤70 °C	-	10	-	μV/ °C
Input Offset Current	I _{IO}			-	25	100	pA
		0 °C≤TA≤70 °C		-	-	4	nA
Input Bias Current	I _{BAIS}			-	50	200	pA
		0 °C≤TA≤70 °C		-	-	8	nA
Input Resistance (Note1)	R _I	-	-	10 ¹²	-	Ω	
Large Signal Voltage Gain	G _V	VO(P-P)= ±10V		25	100	-	V/mV
		RL=2kΩ	0 °C≤TA≤70 °C	15	-	-	
Output Voltage Swing	VO(P-P)	RL = 10kΩ	±12	±13.5	-	V	
Input Voltage Range	V _{I(R)}	-	±11	+15 -12	-	V	
Common Mode Rejection Ratio	CMRR	RS≤10kΩ	70	100	-	dB	
Power Supply Rejection Ratio	PSRR	RS≤10kΩ	70	100	-	dB	
Power Supply Current	ICC	-	-	2.3	3.4	mA	
Slew Rate (Note1)	SR	G _V = 1	-	13	-	V/μs	
Gain-Bandwidth Product (Note1)	GBW	-	-	4	-	MHz	

Note :

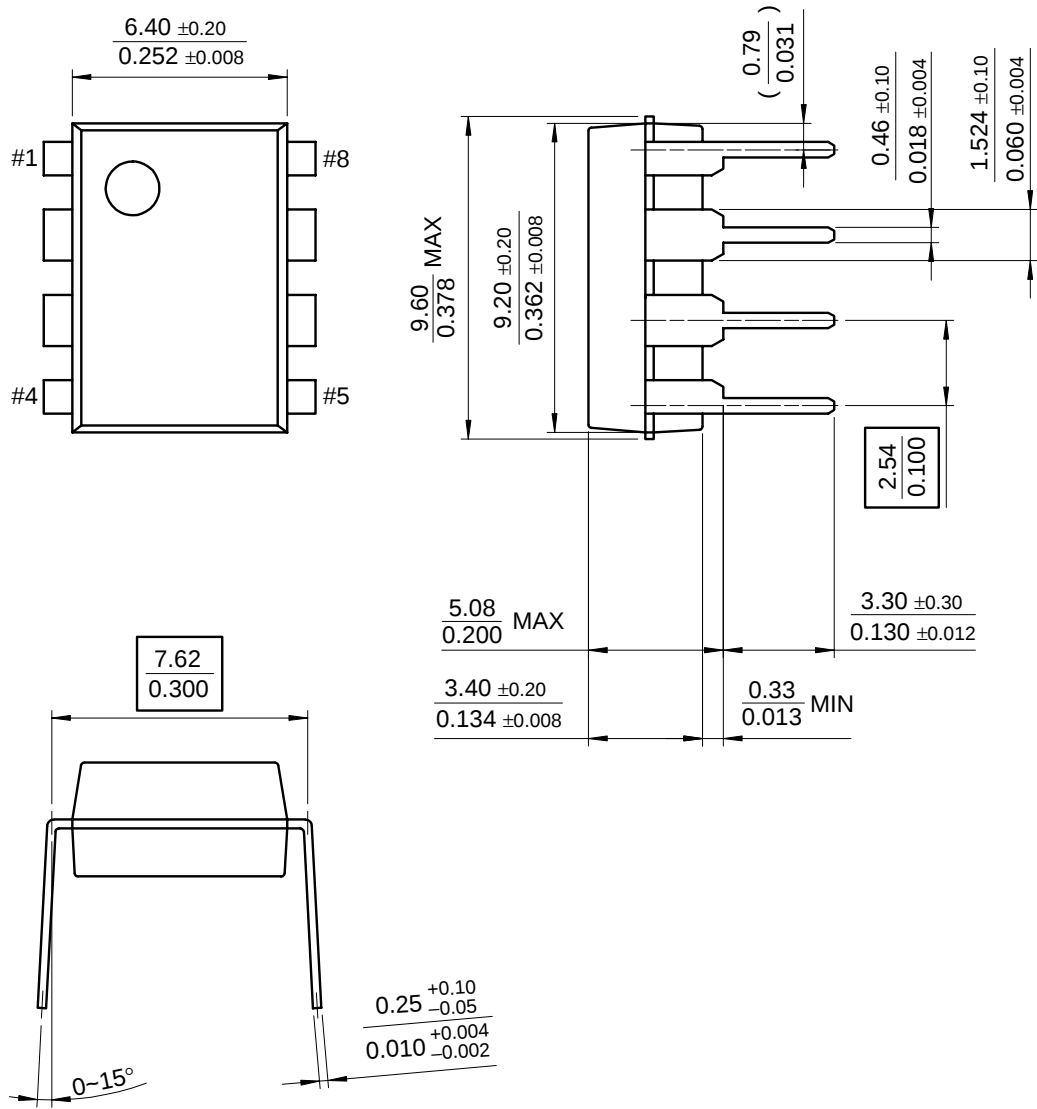
1. Guaranteed by design.

Mechanical Dimensions

Package

Dimensions in millimeters

8-DIP



Ordering Information

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

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