

KF351

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 : $10^{12}\Omega$

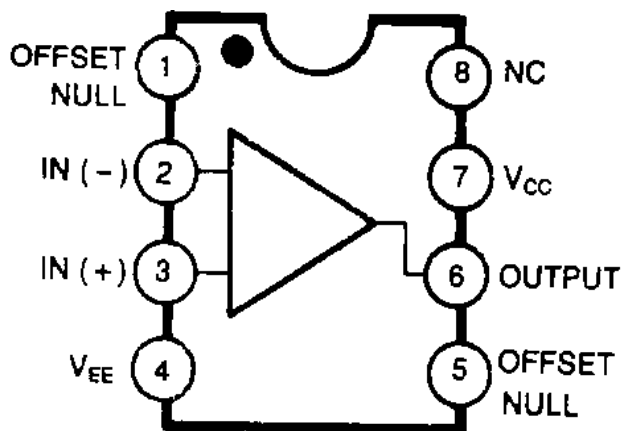
Description

The KF351 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.

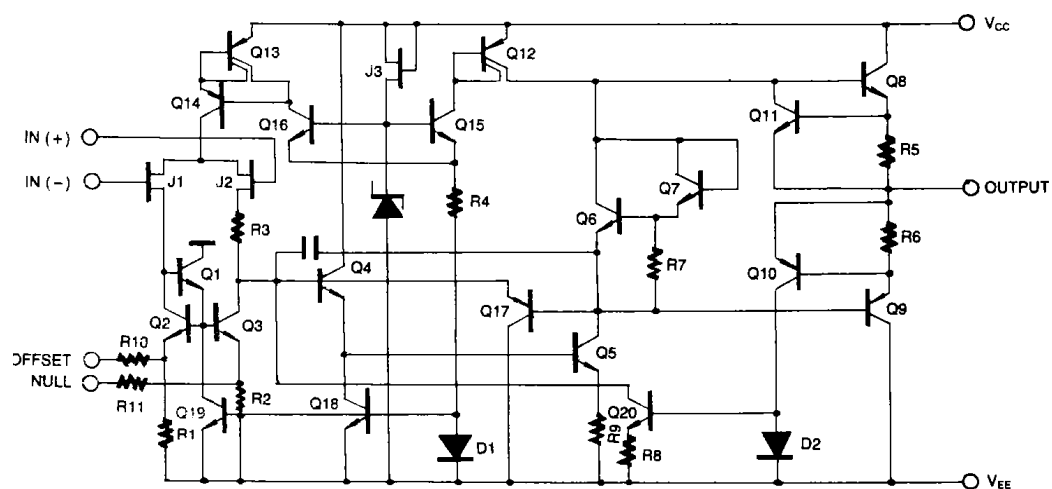
8-DIP



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}	R _S = 10kΩ	-	5.0	10	mV	
		0 °C≤T _A ≤70 °C	-	-	13		
Input Offset Voltage Drift (Note1)	ΔV _{IO} /ΔT	R _S = 10kΩ	0 °C≤T _A ≤70 °C	-	10	-	μV/ °C
Input Offset Current	I _{IO}			-	25	100	pA
		0 °C≤T _A ≤70 °C		-	-	4	nA
Input Bias Current	I _{BAIS}			-	50	200	pA
		0 °C≤T _A ≤70 °C		-	-	8	nA
Input Resistance (Note1)	R _I	-	-	10 ¹²	-	Ω	
Large Signal Voltage Gain	G _V	V _O (P-P)= ± 10V		25	100	-	V/mV
		R _L =2kΩ	0 °C≤T _A ≤70 °C	15	-	-	
Output Voltage Swing	V _O (P-P)	R _L = 10kΩ	±12	±13.5	-	V	
Input Voltage Range	V _I (R)	-	±11	+15 -12	-	V	
Common Mode Rejection Ratio	CMRR	R _S ≤ 10kΩ	70	100	-	dB	
Power Supply Rejection Ratio	PSRR	R _S ≤10kΩ	70	100	-	dB	
Power Supply Current	I _{CC}	-	-	2.3	3.4	mA	
Slew Rate (Note1)	SR	G _V = 1	-	13	-	V/μs	
Gain-Bandwidth Product (Note1)	GBW	-	-	4	-	MHz	

Note :

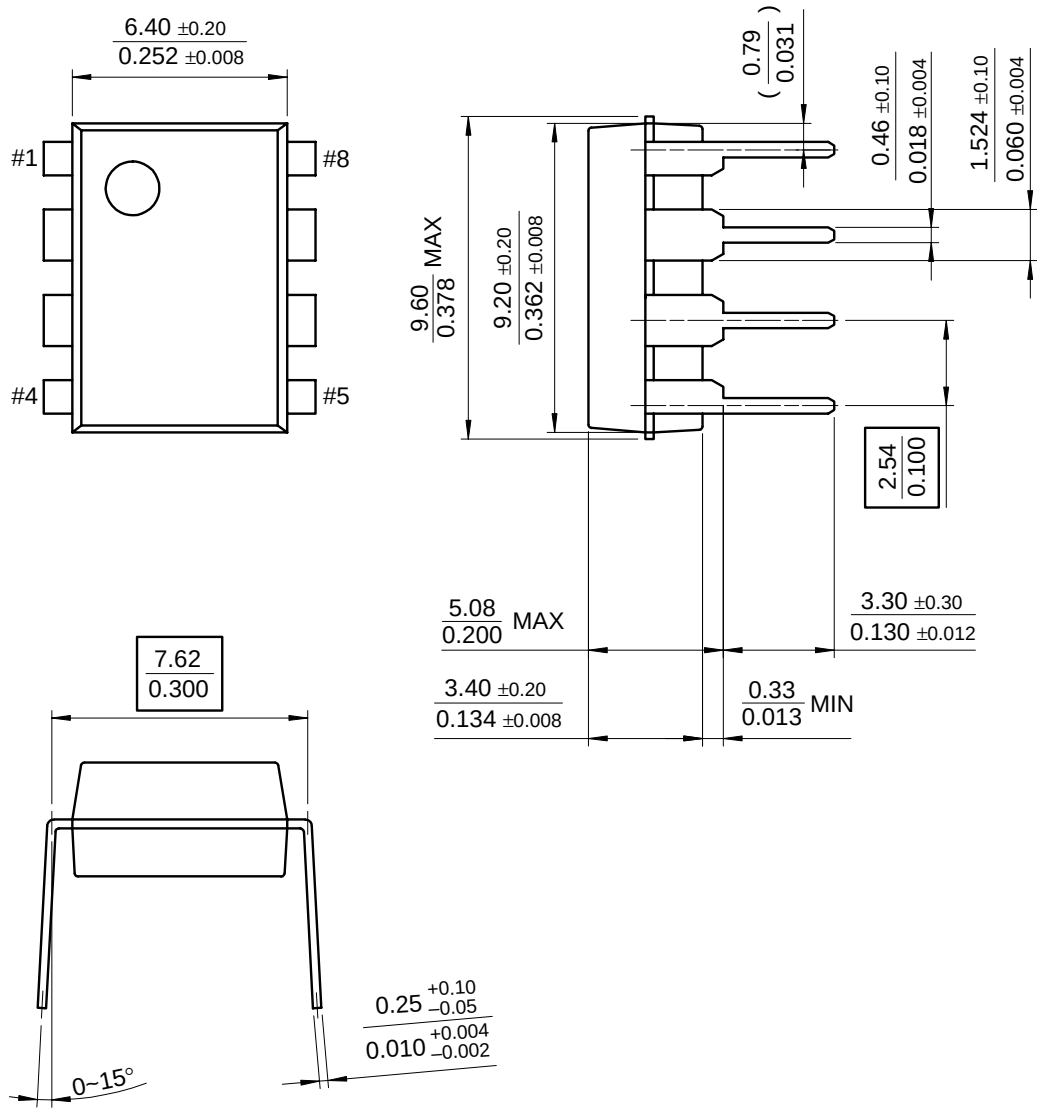
1. Guaranteed by design.

Mechanical Dimensions

Package

Dimensions in millimeters

8-DIP



Ordering Information

Product Number	Package	Operating Temperature
KF351	8-DIP	0 ~ + 70°C

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