

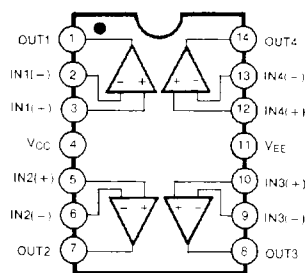
QUAD JFET INPUT OPERATIONAL AMPLIFIERS

The KF347 is a high speed quad JFET input operational amplifiers. This feature high impedance, wide bandwidth, high high slew rate, and low input offset and bias currents. The KF347 may be used in Circuits requiring high input impedance. High slew rate and wide bandwidth, low input bias current.

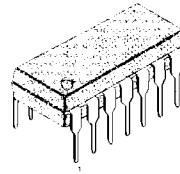
FEATURES

- Low input bias
- High input impedance
- Wide bandwidth: 4 MHz Typ)
- High slew rate: 13 V/ μ s (Typ)

BLOCK DIAGRAM



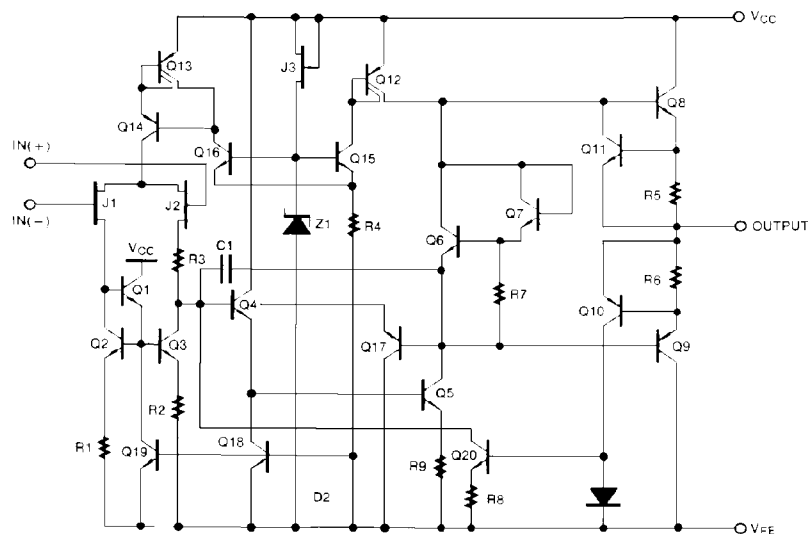
14 DIP



ORDERING INFORMATION

Device	Package	Operating Temperature
KF347 KF347A	14 DIP	0 ~ + 70 °C

SCHEMATIC DIAGRAM (One Section Only)



ABSOLUTE MAXIMUM RATINGS

Characteristics	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	570	mW
Operating Temperature Range KF347/A	T_{OPR}	$0 \sim +70$	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	$-65 \sim +150$	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

(V_{CC}= +15V, V_{EE}= -15V, T_A=25 $^{\circ}\text{C}$, unless otherwise specified)

Characteristic	Symbol	Test Conditions	KF347A			KF347			Unit
			Min	Typ	Max	Min	Typ	Max	
Input Offset Voltage	V_{IO}	$R_S = 10K\Omega$		3	5		5	10	mV
		NOTE 1			7			13	
Input Offset Voltage Drift	$\Delta V_{IO}/\Delta T$	$R_S = 10K\Omega$		10			10		$\mu\text{V}/^{\circ}\text{C}$
Input Offset Current	I_{IO}			25	100		25	100	pA
		NOTE 1			4			4	
Input Bias Current	I_{BIAS}			50	200		50	200	pA
		NOTE 1			8			8	
Large Signal Voltage Gain	G_V	$R_L = 2K\Omega$	50	100		25	100		V/mV
		$V_{O(P-P)} = \pm 10V$ NOTE 1	15			15			
Output Voltage Swing	$V_{O(P-P)}$	$R_L = 10K\Omega$	± 12	± 13.5		± 12	± 13.5		V
Input Voltage Range	$V_{I(R)}$		± 11	+15 -12		± 11	+15 -12		V
Common-Mode Rejection Ratio	CMRR	$R_S \leq 10K\Omega$	80	100		80	100		dB
Power Supply Rejection Ratio	PSRR	$R_S \leq 10K\Omega$	80	100		80	100		dB
Input Resistance	R_i			10^{12}		10^{12}			Ω
Supply Current	I_{CC}			7.2	11		7.2	11	mA
Slew Rate	SR			13		13			V/ μs
Gain Bandwidth Product	GBW			4		4			MHz
Channel Separation	CS	f = 1Hz ~ 20KHz (input referenced)		120			120		dB
Equivalent Input Noise Voltage	V_{NI}	$R_S = 100\Omega$ f = 1KHz		20			20		nV/ $\sqrt{\text{Hz}}$
Equivalent Input Noise Current	I_{NI}	f = 1KHz		0.01			0.01		pA/ $\sqrt{\text{Hz}}$

NOTE 1. KF347/A : $0 \leq T_A \leq +70^{\circ}\text{C}$

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E ² CMOS™	PowerTrench™	
FACT™	QST™	
FACT Quiet Series™	Quiet Series™	
FAST®	SuperSOT™-3	
FASTr™	SuperSOT™-6	
GTO™	SuperSOT™-8	
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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
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