

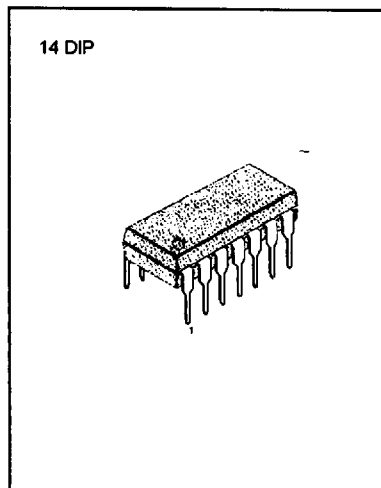
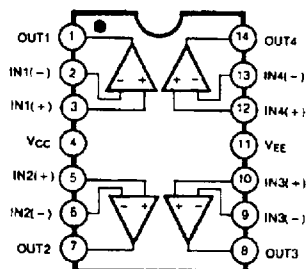
**QUAD JFET INPUT OPERATIONAL AMPLIFIERS**

The KF347 is a high speed quad JFET input operational amplifiers. This feature high impedance, wide bandwidth, 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/ $\mu$ s (Typ)

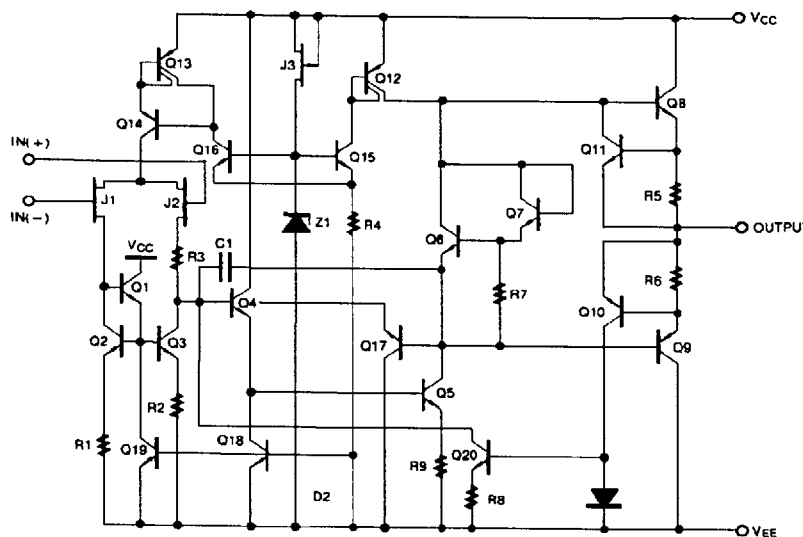
**BLOCK DIAGRAM**



**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	$V_{CC}$	$\pm 18$	V
Differential Input Voltage	$V_{I(DIFF)}$	$\pm 30$	V
Input Voltage Range	$V_I$	$\pm 15$	V
Output Short Circuit Duration		Continuous	
Power Dissipation	$P_D$	570	mW
Operating Temperature Range KF347/A	$T_{OPR}$	0 ~ + 70	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 ~ + 150	$^{\circ}C$

**ELECTRICAL CHARACTERISTICS**

( $V_{CC} = +15V$ ,  $V_{EE} = -15V$ ,  $T_A = 25^{\circ}C$ , 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		$\mu V/^{\circ}C$
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
		$V_{O(P-P)} = \pm 10V$	15			15			
Output Voltage Swing	$V_{O(P-P)}$	$R_L = 10K\Omega$	$\pm 12$	$\pm 13.5$		$\pm 12$	$\pm 13.5$		V
Input Voltage Range	$V_{I(R)}$		$\pm 11$	+15 -12		$\pm 11$	+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	$R_I$			$10^{12}$		$10^{12}$			$\Omega$
Supply Current	$I_{CC}$			7.2	11		7.2	11	mA
Slew Rate	SR			13		13			V/ $\mu S$
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/ $\sqrt{HZ}$
Equivalent Input Noise Current	$I_{NI}$	f = 1KHz		0.01			0.01		pA/ $\sqrt{HZ}$

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

Dimensions in Millimeters

