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[Fairchild Semiconductor](#)
[KF347](#)

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KF347

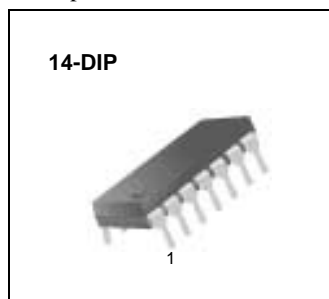
Quad Operational Amplifier (JFET)

Features

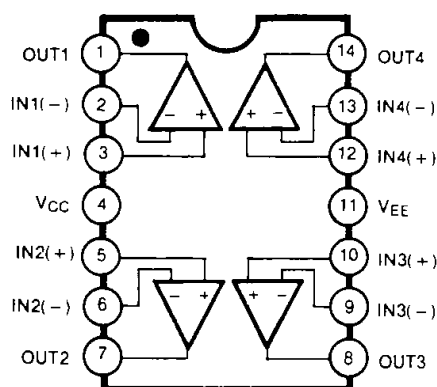
- Low input bias current
- High input impedance
- Wide gain bandwidth: 4 MHz Typ.
- High slew rate: 13 V/μs Typ.

Description

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



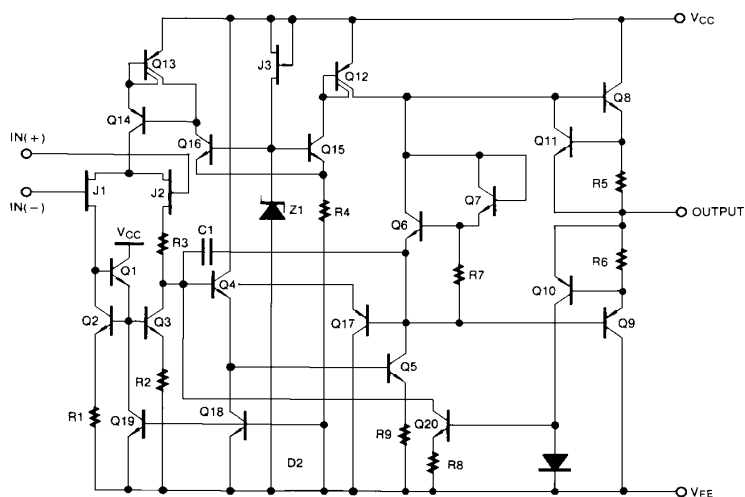
Internal Block Diagram



KF347

Schematic Diagram

(One Section Only)



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	570	mW
Operating Temperature Range	TOPR	0 ~ + 70	°C
Storage Temperature Range	TSTG	-65 ~ + 150	°C

Electrical Characteristics

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

Parameter	Symbol	Conditions	KF347			Unit
			Min.	Typ.	Max.	
Input Offset Voltage	V _{IO}	RS = 10KΩ	-	5	10	mV
		Note 1	-	-	13	
Input Offset Voltage Drift(Note2)	ΔV _{IO} /ΔT	RS = 10KΩ	-	10	-	μV/°C
Input Offset Current	I _{IO}		-	25	100	pA
		Note 1	-	-	4	nA
Input Bias Current	I _{BIAS}		-	50	200	pA
		Note 1	-	-	8	nA
Large Signal Voltage Gain	G _V	RL = 2KΩ	25	100	-	V/mA
		VO(P-P)= ±10V Note 1	15	-	-	
Output Voltage Swing	V _{O(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	80	100	-	dB
Power Supply Rejection Ratio	PSRR	RS ≤ 10KΩ	80	100	-	dB
Input Resistance	R _I	-	-	10 ¹²	-	Ω
Supply Current	I _{CC}	-	-	7.2	11	mA
Slew Rate	SR	-	-	13	-	V/μS
Gain Bandwidth Product(Note2)	GBW	-	-	4	-	MHz
Channel Separation	CS	f = 1Hz ~ 20KHz (input referenced)	-	120	-	dB
Equivalent Input Noise Voltage	e _N	RS = 100Ω f = 1KHz	-	20	-	nV/ √Hz
Equivalent Input Noise Current	i _N	f = 1KHz	-	0.01	-	pA/√Hz

Note :

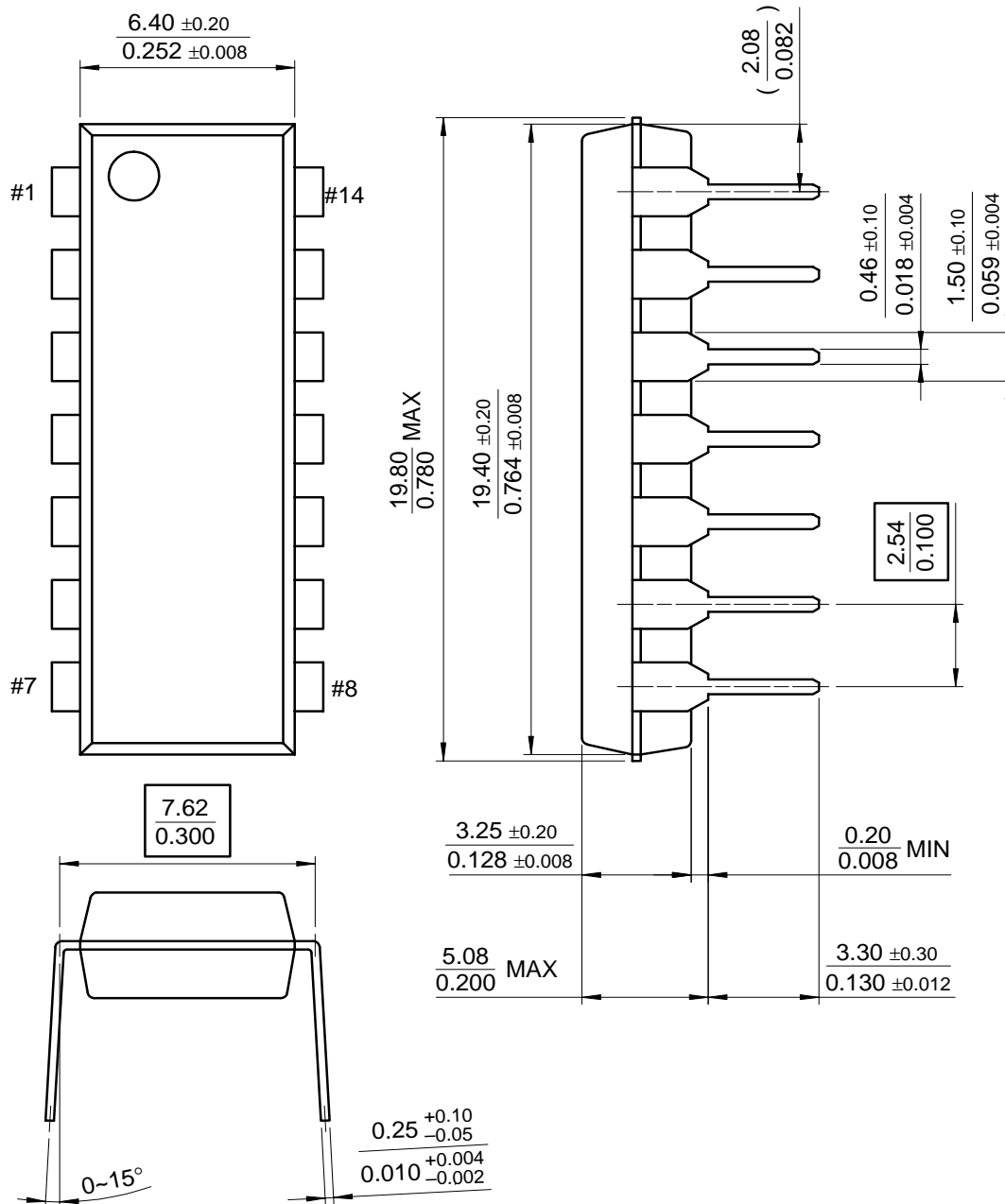
1. KF347: 0 ≤ TA ≤ +70 °C
2. Guaranteed by design.

KF347

Mechanical Dimensions

Package

14-DIP



Ordering Information

Product Number	Package	Operating Temperature
KF347	14-DIP	0 ~ + 70°C

KF347

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