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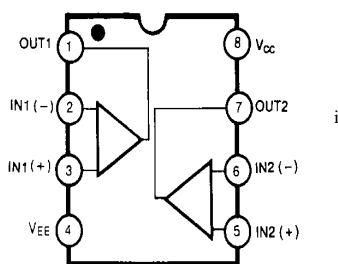
Name	Last modified	Size	Description
 <a href="#">_ Parent Directory</a>			
 <a href="#">_LF353.pdf</a>	22-Dec-99 00:11	49K	
 <a href="#">_LF353M.pdf</a>	22-Dec-99 00:11	49K	
 <a href="#">_LF353N.pdf</a>	22-Dec-99 00:11	49K	
 <a href="#">_LF353S.pdf</a>	22-Dec-99 00:11	49K	

**DUAL OPERATIONAL AMPLIFIER**

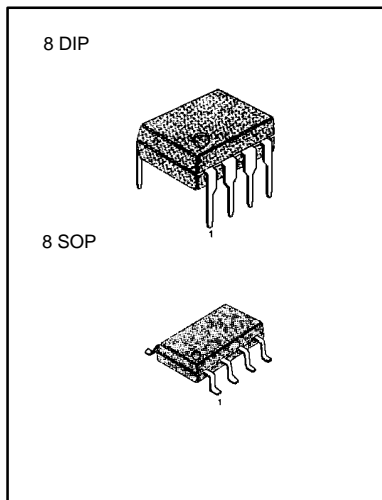
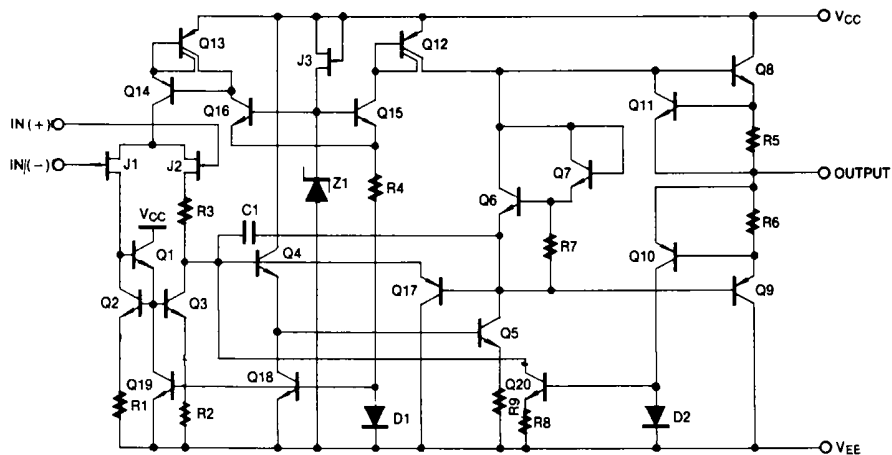
The LF353 is a JFET input operational amplifier with an internally compensated input offset voltage. The JFET input device provides with bandwidth, low input bias currents and offset currents.

**FEATURES**

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

**BLOCK DIAGRAM**

**ORDERING INFORMATION**

Device	Package	Operating Temperature
LF353N	8 DIP	0 ~ + 70°C
LF353M	8 SOP	
LF353S	9 SIP	


**SCHEMATIC DIAGRAM (One Section Only)**


**ABSOLUTE MAXIMUM RATINGS**

Characteristics	Symbol	Value	Unit
Power Supply Voltage	$V_{CC}$	$\pm 18$	V
Differential Input Voltage	$V_{I(DIFF)}$	30	V
Input Voltage Range	$V_I$	$\pm 15$	V
Output Short Circuit Duration		Continuous	
Power Dissipation	$P_D$	500	mW
Operating Temperature Range	$T_{OPR}$	0 ~ +70	°C
Storage Temperature Range	$T_{STG}$	-65 ~ +150	°C

**ELECTRICAL CHARACTERISTICS**

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Offset Voltage	$V_{IO}$	$R_S=10K\Omega$ $0^\circ C \leq T_A \leq +70^\circ C$		5.0	10	mV
Input Offset Voltage Drift	$\Delta V_{IO}/\Delta T$	$R_S=10K\Omega$ $0^\circ C \leq T_A \leq +70^\circ C$		10		$\mu V/^\circ C$
Input Offset Current	$I_{IO}$	$0^\circ C \leq T_A \leq +70^\circ C$		25	100	pA
Input Bias Current	$I_{BIAS}$	$0^\circ C \leq T_A \leq +70^\circ C$		50	200	pA
Input Resistance	$R_I$			$10^{12}$		$\Omega$
Large Signal Voltage Gain	$G_V$	$V_{O(P-P)} = \pm 0V$ $R_L = 2K\Omega$ $0^\circ C \leq T_A \leq +70^\circ C$	25	100		V/mV
Output Voltage Swing	$V_{O(P-P)}$	$R_L = 10K\Omega$	$\pm 12$	$\pm 13.5$		V
Input Voltage Range	$V_{I(R)}$		$\pm 11$	$\pm 15/-12$		V
Common Mode Rejection Ratio	CMRR	$R_S \geq 10K\Omega$	70	100		dB
Power Supply Rejection Ratio	PSRR	$R_S \geq 10K\Omega$	70	100		dB
Power Supply Current	$I_{CC}$			3.6	6.5	mA
Slew Rate	SR	$G_V = 1$		13		V/ $\mu s$
Gain-Bandwidth Product	GBM			4		MHz
Channel Separation	CS	$f = 1Hz \sim 20KHz$ (Input referenced)	120	120		dB
Equivalent Input Noise Voltage	$V_{NI}$	$R_S = 100\Omega$ $f = 1KHz$	16	16		nV/ $\sqrt{Hz}$
Equivalent Input Noise Current	$I_{NI}$	$f = 1KHz$	0.01	0.01		pA/ $\sqrt{Hz}$

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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FASTr™	SuperSOT™-6
GTO™	SuperSOT™-8
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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