



## WIDE BANDWIDTH DUAL J-FET OPERATIONAL AMPLIFIERS

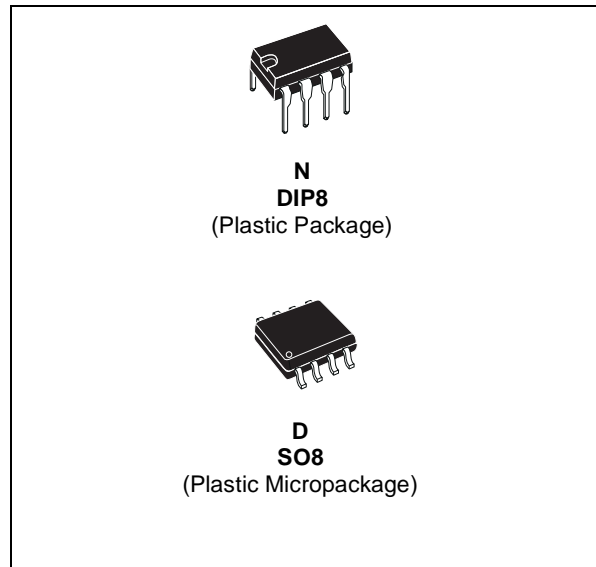
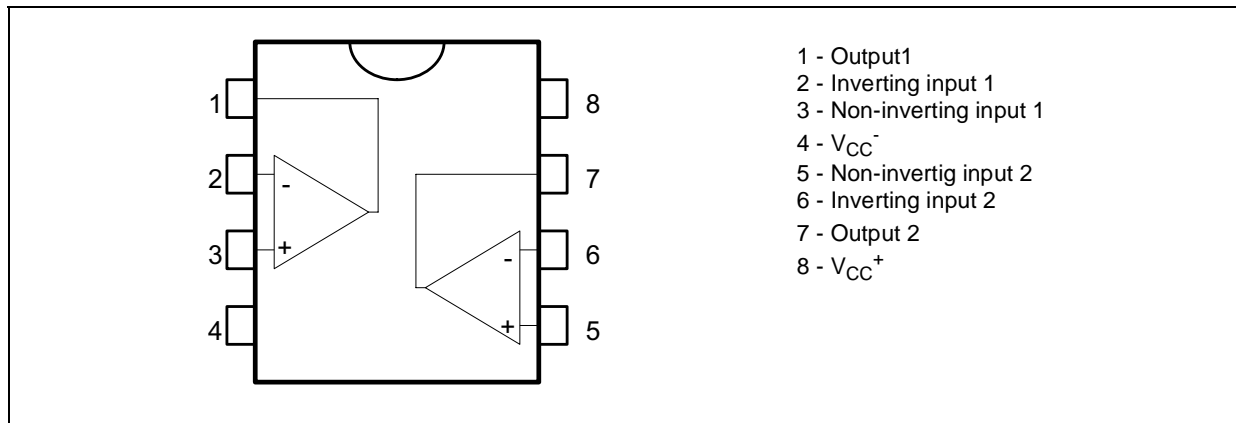
- LOW POWER CONSUMPTION
- WIDE COMMON-MODE (UP TO  $V_{CC}^+$ ) AND DIFFERENTIAL VOLTAGE RANGE
- LOW INPUT BIAS AND OFFSET CURRENT
- OUTPUT SHORT-CIRCUIT PROTECTION
- HIGH INPUT IMPEDANCE J-FET INPUT STAGE
- INTERNAL FREQUENCY COMPENSATION
- LATCH UP FREE OPERATION
- HIGH SLEW RATE :  $16V/\mu s$  (typ)

### DESCRIPTION

The LF353 are high speed J-FET input dual operational amplifiers incorporating well matched, high voltage J-FET and bipolar transistors in a monolithic integrated circuit.

The devices feature high slew rates, low input bias and offset currents, and low offset voltage temperature coefficient.

### PIN CONNECTIONS (top view)

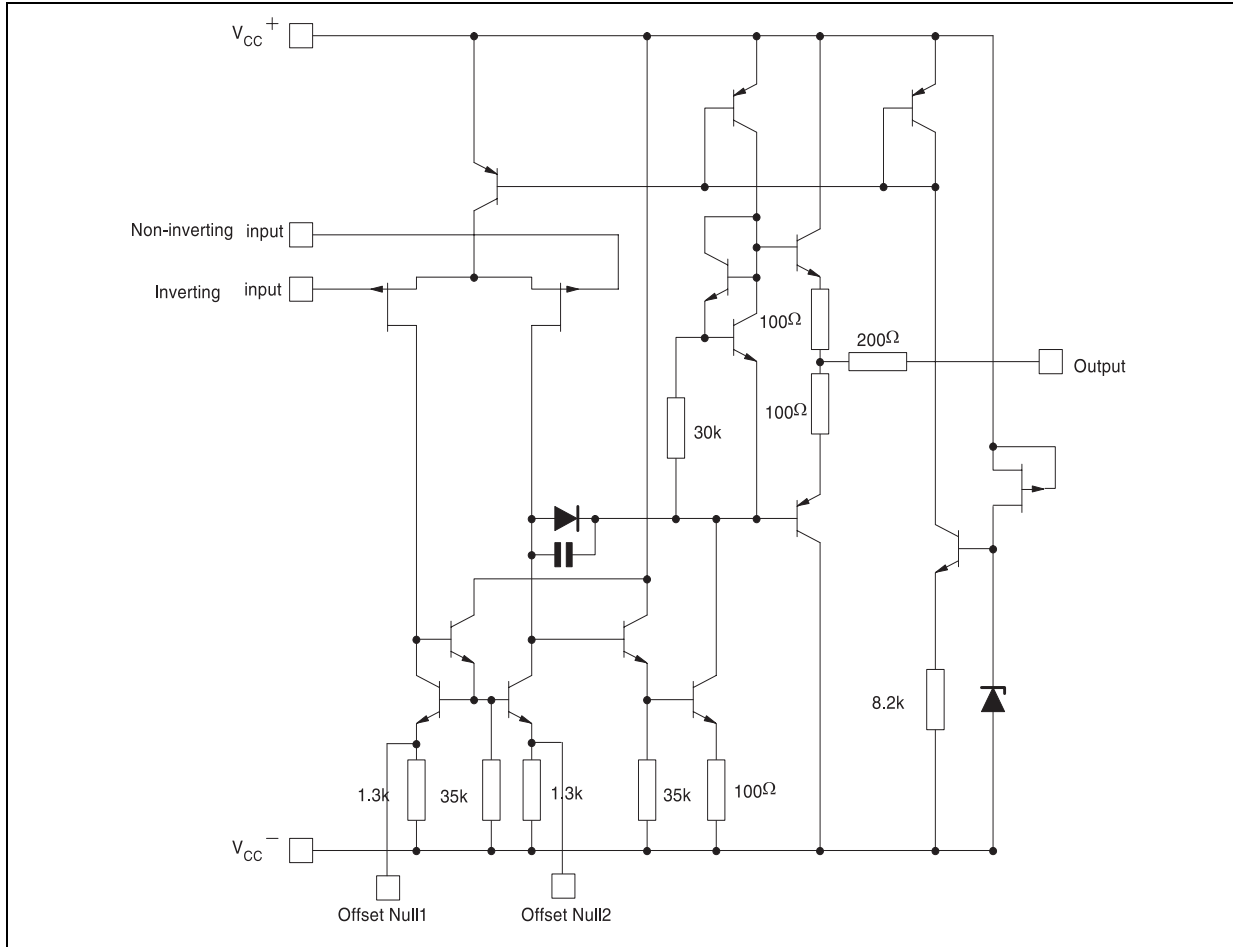


### ORDER CODE

Part Number	Temperature Range	Package	
		N	D
LF353	0°C, +70°C	•	•
LF253	-40°C, +105°C	•	•
LF153	-55°C, +125°C	•	•

N = Dual in Line Package (DIP)  
D = Small Outline Package (SO) - also available in Tape & Reel (DT)

**SCHEMATIC DIAGRAM** (each amplifier)



**ABSOLUTE MAXIMUM RATINGS**

Symbol	Parameter	LF153	LF253	LF353	Unit
$V_{CC}$	Supply voltage - note <sup>1)</sup>		±18		V
$V_i$	Input Voltage - note <sup>2)</sup>		±15		V
$V_{id}$	Differential Input Voltage - note <sup>3)</sup>		±30		V
$P_{tot}$	Power Dissipation		680		mW
	Output Short-circuit Duration - note <sup>4)</sup>		Infinite		
$T_{oper}$	Operating Free-air Temperature Range	-55 to +125	-40 to +105	0 to +70	°C
$T_{stg}$	Storage Temperature Range	-65 to +150			°C

1. All voltage values, except differential voltage, are with respect to the zero reference level (ground) of the supply voltages where the zero reference level is the midpoint between  $V_{CC}^+$  and  $V_{CC}^-$ .
2. The magnitude of the input voltage must never exceed the magnitude of the supply voltage or 15 volts, whichever is less.
3. Differential voltages are the non-inverting input terminal with respect to the inverting input terminal.
4. The output may be shorted to ground or to either supply. Temperature and/or supply voltages must be limited to ensure that the dissipation rating is not exceeded.

