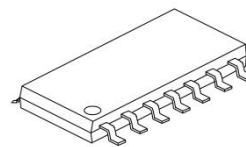


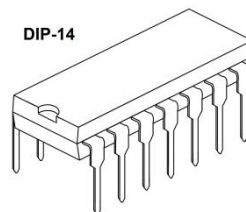
General purpose JFET quad operational amplifier

Features

- Low Power Consumption
- Wide Common-Mode and Differential Voltage Ranges
- Low Input Bias and Offset Currents
- Output Short-Circuit Protection
- Low Total Harmonic Distortion 0.003% Typ
- High Input Impedance JFET-Input Stage
- High Slew Rate 13 V/ μ s Typ
- Latch-Up-Free Operation
- Common-Mode Input Voltage Range Includes V_{CC+}

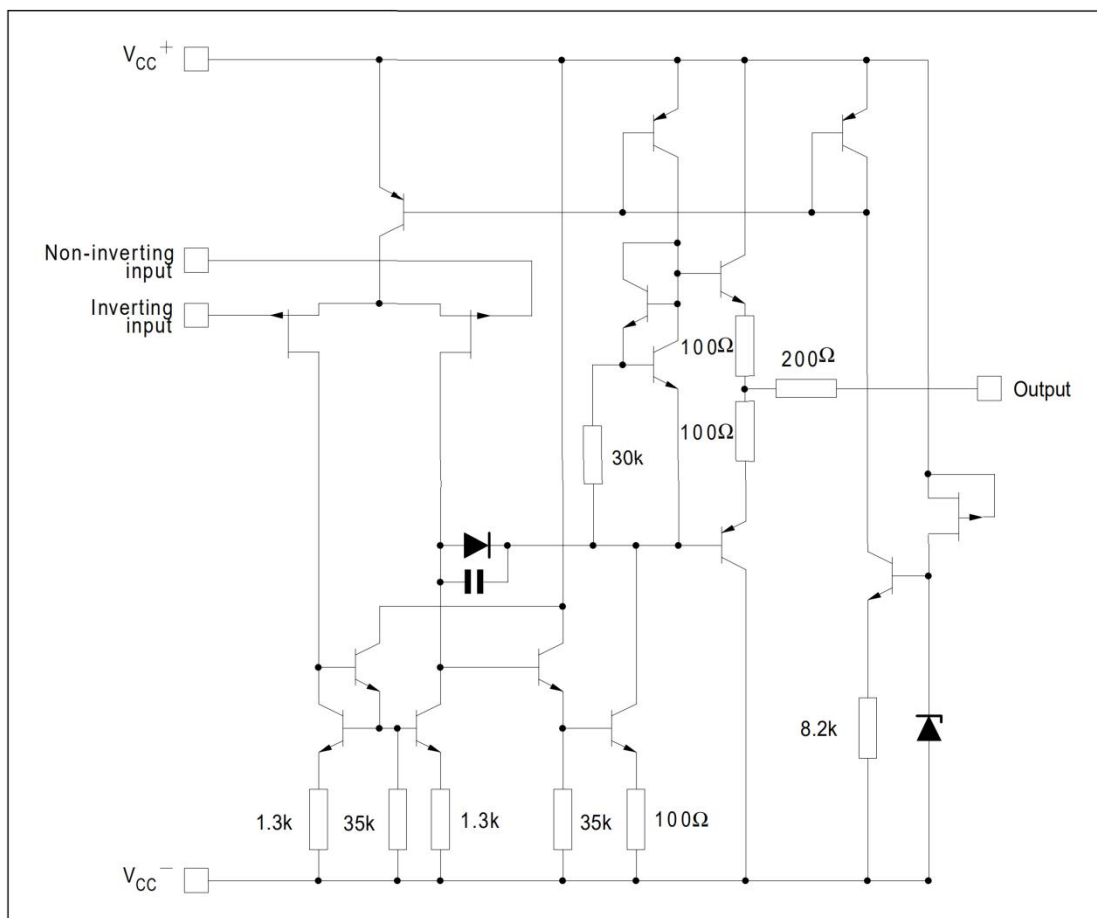


SOP-14



DIP-14

Schematic diagram

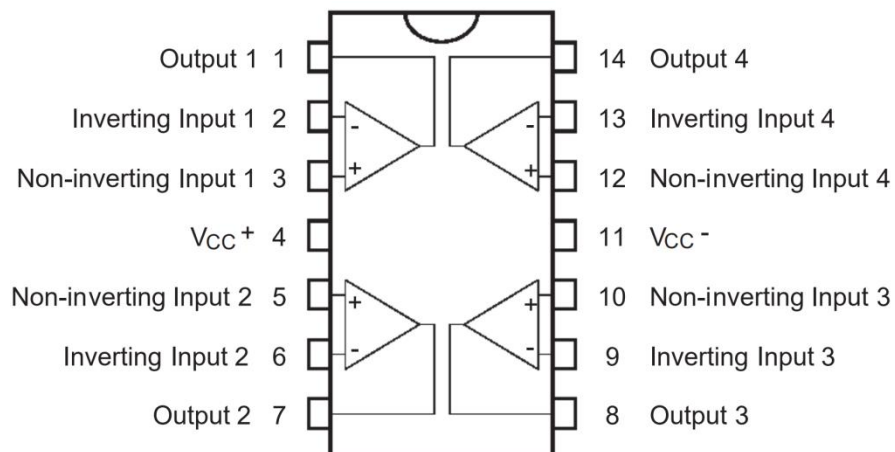


Absolute maximum ratings

Parameter	Symbol	Max	Unit
Supply voltage	V_{CC+}	18	V
Supply voltage	V_{CC-}	-18	V
Differential input voltage	V_{ID}	± 30	V
Input voltage	V_I	± 15	V
Operating free-air temperature range	T_A	0 ~ 70	$^{\circ}\text{C}$

Electrical characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input offset voltage	V_{IO}	$V_O=0, R_S=50\Omega$	-	5	15	mV
Input bias current	I_{IB}	$V_O=0$	-	30	400	pA
Input offset current	I_{IO}	$V_O=0$	-	10	100	pA
Common-mode input voltage range	V_{ICR}	-	± 11	-12~+15	-	V
Common-mode rejection ratio	CMRR	$V_{IC}=V_{ICRmin}, V_O=0, R_S=50\Omega$	70	86	-	dB
Supply-voltage rejection ratio	PSRR	$V_{CC}=\pm 15V \sim \pm 9V$ $V_O=0, R_S=50\Omega$	70	86	-	dB
Large-signal differential voltage amplification	A_{VD}	$V_O=0, R_L \geq 2K\Omega$	25	200		V/mv
Maximum peak output voltage swing	VOM	$R_L=10K\Omega$	± 12	± 13.5	—	V
		$R_L \geq 2K\Omega$	± 10	± 12	—	V
Supply current (per amplifier)	I_{CC}	$V_O=0$, unload	—	1.4	2.8	mA
Unity-gain bandwidth	GBW	—	—	3	—	MHz
Slew rate at unity gain	S_R	$V_I = 10 V, R_L = 2 k\Omega, C_L = 100 pF$, See Figure 1	8	13	—	V/ μs
Rise time	T_r	$V_I = 20 mV, R_L = 2 k\Omega$,	—	0.05	—	μs
Overshoot factor		$C_L = 100 pF$, See Figure 1	—	20	—	%

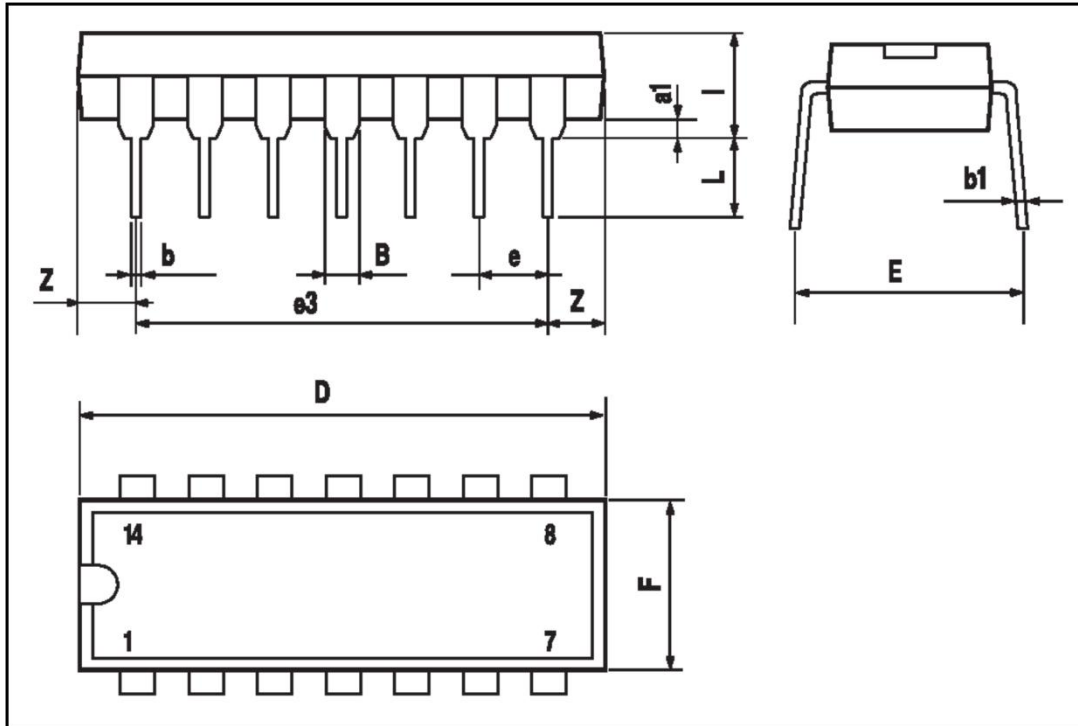
PIN Connections (Top view)


Voltage Follower


$$f_O = 100\text{kHz}$$

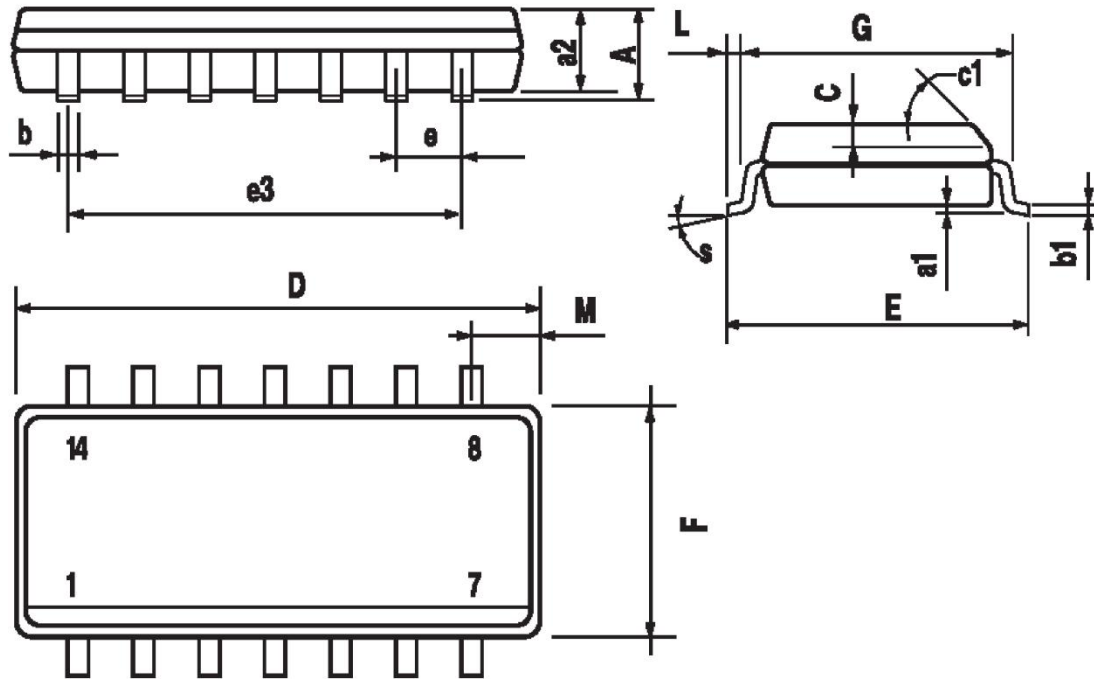

Package Mechanical DATA

- DIP-14



Dimensions	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
a1	0.51			0.02		
B	1.39		1.6	0.055		0.065
b		0.5			0.02	
b1		0.25			0.01	
D			20			0.787
E		8.5			0.335	
e		2.54			0.1	
e3		15.24			0.6	
F			7.1			0.28
i			5.1			0.201
L		3.3			0.13	
Z	1.27		2.54	0.05		0.1

● SOP-14



Dimensions	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A			1.75			0.069
a1	0.1		0.2	0.004		0.008
a2			1.6			0.063
b	0.35		0.46	0.014		0.018
b1	0.19		0.25	0.007		0.01
C		0.5			0.02	
c1	45° (Typ)					
D	8.55		8.75	0.336		0.334
E	5.8		6.2	0.228		0.244
e		1.27			0.05	
e3		7.62			0.3	
F	3.8		4	0.15		0.157
G	4.6		5.3	0.181		0.208
L	0.5		1.27	0.02		0.05
M			0.68			0.027
S	8° (Max)					