

**TL061, TL061A, TL061B, TL062, TL062A
TL062B, TL064, TL064A, TL064B**
LOW-POWER JFET-INPUT OPERATIONAL AMPLIFIERS

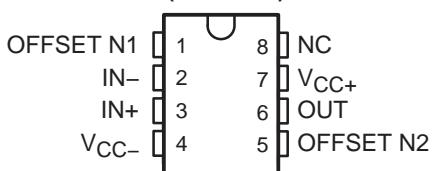
SLOS078J – NOVEMBER 1978 – REVISED SEPTEMBER 2004

- Very Low Power Consumption
- Typical Supply Current . . . 200 μ A (Per Amplifier)
- Wide Common-Mode and Differential Voltage Ranges
- Low Input Bias and Offset Currents
- Common-Mode Input Voltage Range Includes V_{CC+}
- Output Short-Circuit Protection
- High Input Impedance . . . JFET-Input Stage
- Internal Frequency Compensation
- Latch-Up-Free Operation
- High Slew Rate . . . 3.5 V/ μ s Typ

TL061, TL061A . . . D, P, OR PS PACKAGE

TL061B . . . P PACKAGE

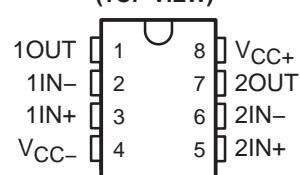
(TOP VIEW)



TL062 . . . D, JG, P, PS, OR PW PACKAGE

TL062A . . . D, P, OR PS PACKAGE

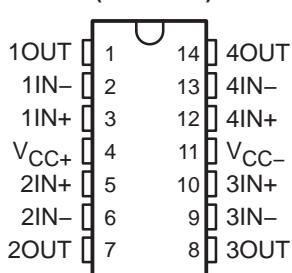
(TOP VIEW)



TL064 . . . D, J, N, NS, PW, OR W PACKAGE

TL064A, TL064B . . . D OR N PACKAGE

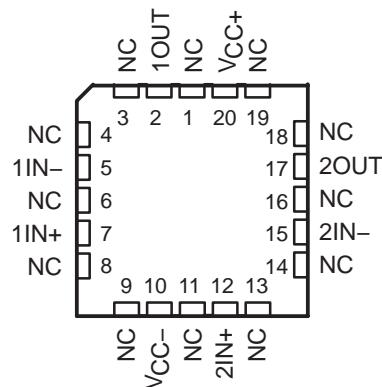
(TOP VIEW)



NC – No internal connection

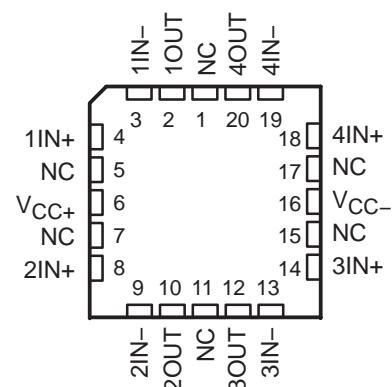
TL062 . . . FK PACKAGE

(TOP VIEW)



TL064 . . . FK PACKAGE

(TOP VIEW)



description/ordering information

The JFET-input operational amplifiers of the TL06 series are designed as low-power versions of the TL08 series amplifiers. They feature high input impedance, wide bandwidth, high slew rate, and low input offset and input bias currents. The TL06 series features the same terminal assignments as the TL07 and TL08 series. Each of these JFET-input operational amplifiers incorporates well-matched, high-voltage JFET and bipolar transistors in an integrated circuit.

The C-suffix devices are characterized for operation from 0°C to 70°C. The I-suffix devices are characterized for operation from -40°C to 85°C, and the M-suffix devices are characterized for operation over the full military temperature range of -55°C to 125°C.



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

PRODUCTION DATA information is current as of publication date. Products conform to specifications per the terms of Texas Instruments standard warranty. Production processing does not necessarily include testing of all parameters.

**TEXAS
INSTRUMENTS**

POST OFFICE BOX 655303 • DALLAS, TEXAS 75265

Copyright © 2004, Texas Instruments Incorporated
On products compliant to MIL-PRF-38535, all parameters are tested unless otherwise noted. On all other products, production processing does not necessarily include testing of all parameters.

**TL061, TL061A, TL061B, TL062, TL062A
TL062B, TL064, TL064A, TL064B
LOW-POWER JFET-INPUT OPERATIONAL AMPLIFIERS**

SLOS078J – NOVEMBER 1978 – REVISED SEPTEMBER 2004

description/ordering information (continued)

ORDERING INFORMATION

TA	V _{IOMAX} AT 25°C	PACKAGE ^T		ORDERABLE PART NUMBER	TOP-SIDE MARKING
0°C to 70°C	15 mV	PDIP (P)	Tube of 50	TL061CP	TL061CP
				TL062CP	TL062CP
		PDIP (N)	Tube of 25	TL064CN	TL064CN
		SOIC (D)	Tube of 75	TL061CD	TL061C
			Reel of 2500	TL061CDR	
			Tube of 75	TL062CD	TL062C
			Reel of 2500	TL062CDR	
			Tube of 50	TL064CD	TL064C
			Reel of 2500	TL064CDR	
		SOP (PS)	Reel of 2000	TL061CPSR	T061
				TL062CPSR	T062
		SOP (NS)	Reel of 2000	TL064CNSR	TL064
		TSSOP (PW)	Tube of 150	TL062CPW	T062
			Reel of 2000	TL062CPWR	
			Tube of 90	TL064CPW	T064
			Reel of 2000	TL064CPWR	
0°C to 70°C	6 mV	PDIP (P)	Tube of 50	TL061ACP	TL061ACP
				TL062ACP	TL062ACP
		PDIP (N)	Tube of 25	TL064ACN	TL064ACN
		SOIC (D)	Tube of 75	TL061ACD	061AC
			Reel of 2500	TL061ACDR	
			Tube of 75	TL062ACD	062AC
			Reel of 2500	TL062ACDR	
			Tube of 50	TL064ACD	TL064AC
		SOP (PS)	Reel of 2500	TL064ACDR	
			Reel of 2000	TL061ACPSR	T061A
				TL062ACPSR	T062A
		PDIP (P)	Tube of 50	TL061BCP	TL061BCP
				TL062BCP	TL062BCP
		PDIP (N)	Tube of 25	TL064BCN	TL064BCN
		SOIC (D)	Tube of 75	TL062BCD	062BC
			Reel of 2500	TL062BCDR	
			Tube of 50	TL064BCD	TL064BC
			Reel of 2500	TL064BCDR	

^T Package drawings, standard packing quantities, thermal data, symbolization, and PCB design guidelines are available at www.ti.com/sc/package.

**TL061, TL061A, TL061B, TL062, TL062A
TL062B, TL064, TL064A, TL064B**
LOW-POWER JFET-INPUT OPERATIONAL AMPLIFIERS

SLOS078J – NOVEMBER 1978 – REVISED SEPTEMBER 2004

description/ordering information (continued)

ORDERING INFORMATION (continued)

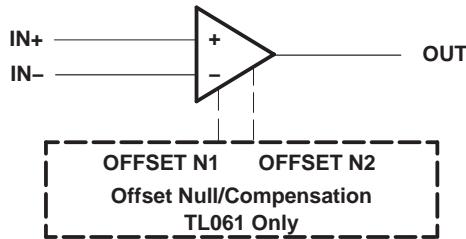
TA	V _{IO} MAX AT 25°C	PACKAGE [†]		ORDERABLE PART NUMBER	TOP-SIDE MARKING
-40°C to 85°C	6 mV	PDIP (P)	Tube of 50	TL061IP	TL061IP
				TL062IP	TL062IP
		PDIP (N)	Tube of 25	TL064IN	TL064IN
			Tube of 75	TL061ID	TL061I
			Reel of 2000	TL061IDR	
		SOIC (D)	Tube of 75	TL062ID	TL062I
			Reel of 2000	TL062IDR	
			Tube of 50	TL064ID	TL064I
			Reel of 2500	TL064IDR	
		TSSOP (PW)	Reel of 2000	TL062IPWR	TL062I
-55°C to 125°C	6 mV	CDIP (JG)	Tube of 50	TL062MJG	TL062MJG
		LCCC (FK)	Tube of 55	TL062MFK	TL062MFK
	9 mV	CDIP (J)	Tube of 25	TL064MJ	TL064MJ
		CFP (W)	Tube of 150	TL064MW	TL064MW
		LCCC (FK)	Tube of 55	TL064MFK	TL064MFK

[†] Package drawings, standard packing quantities, thermal data, symbolization, and PCB design guidelines are available at www.ti.com/sc/package.

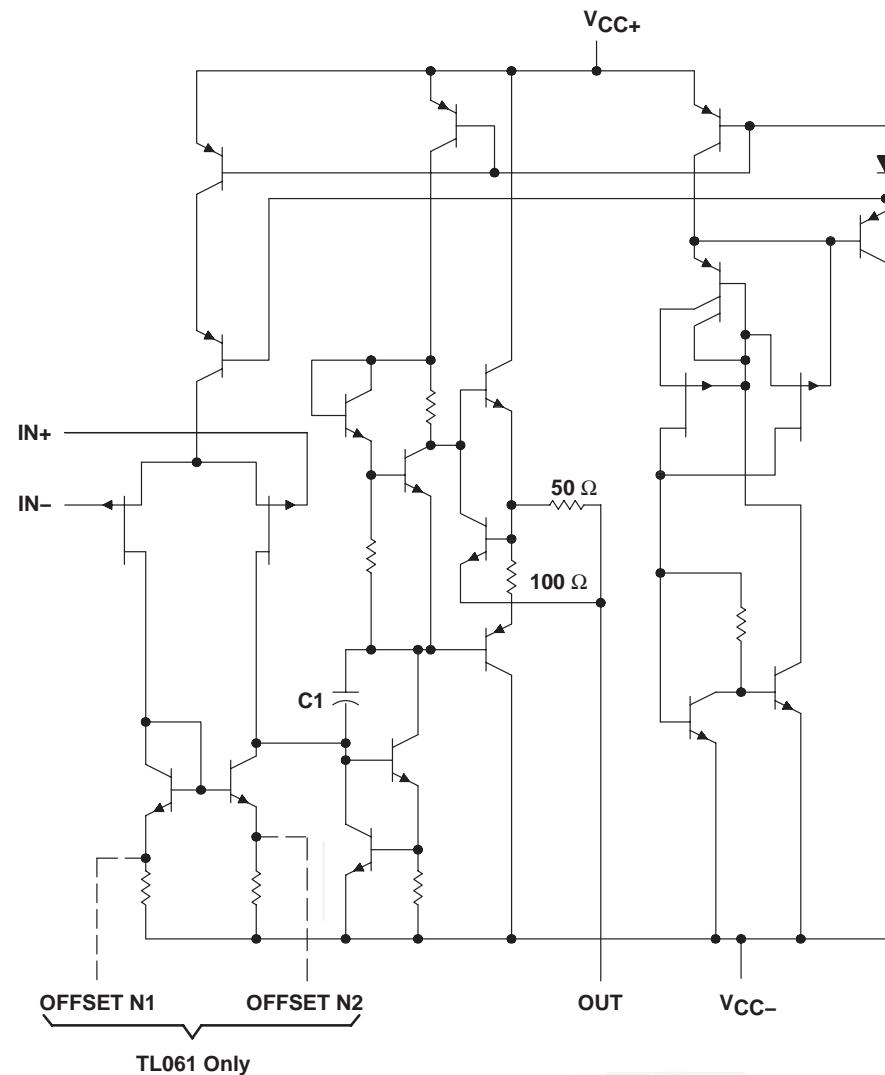
**TL061, TL061A, TL061B, TL062, TL062A
TL062B, TL064, TL064A, TL064B
LOW-POWER JFET-INPUT OPERATIONAL AMPLIFIERS**

SLOS078J – NOVEMBER 1978 – REVISED SEPTEMBER 2004

symbol (each amplifier)



schematic (each amplifier)



C1 = 10 pF on TL061, TL062, and TL064
Component values shown are nominal.