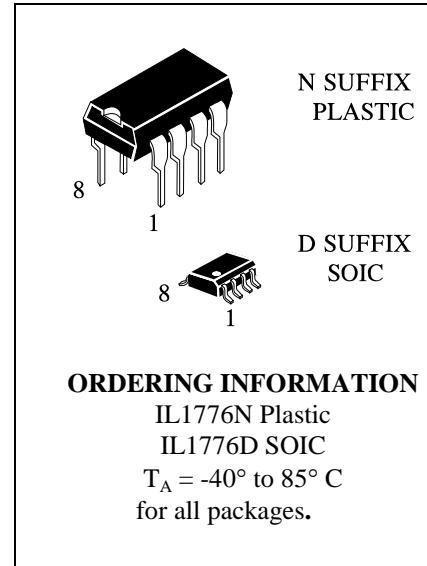


## MICROPOWER PROGRAMMABLE OPERATIONAL AMPLIFIER

**IL1776**

This extremely versatile operational amplifier features low power consumption and high input impedance. In addition, the quiescent currents within the device may be programmed by the choice of an external resistor value or current source applied to the  $I_{set}$  input. This allows the amplifier's characteristics to be optimized for input current and power consumption despite wide variations in operating power supply voltages.



### ORDERING INFORMATION

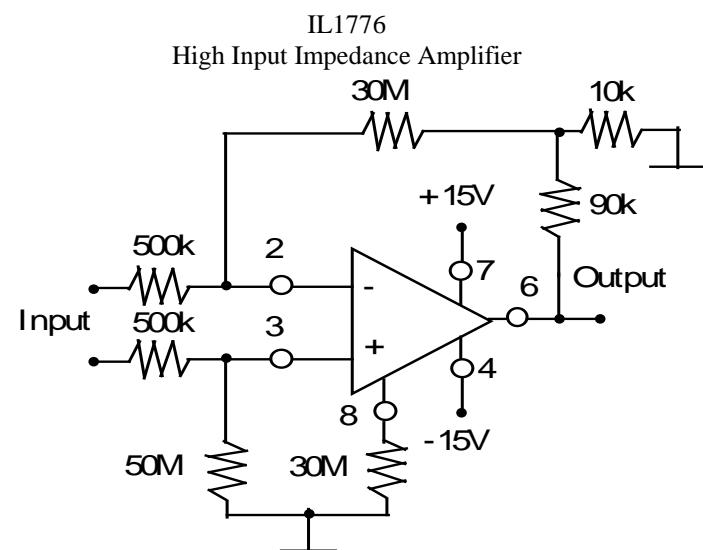
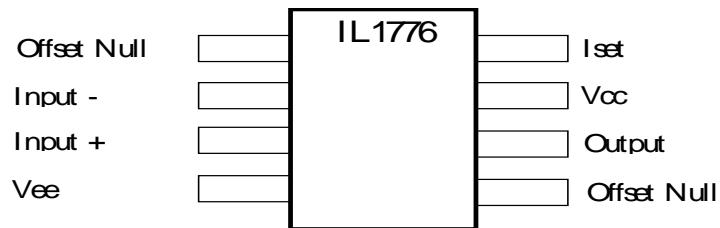
IL1776N Plastic

IL1776D SOIC

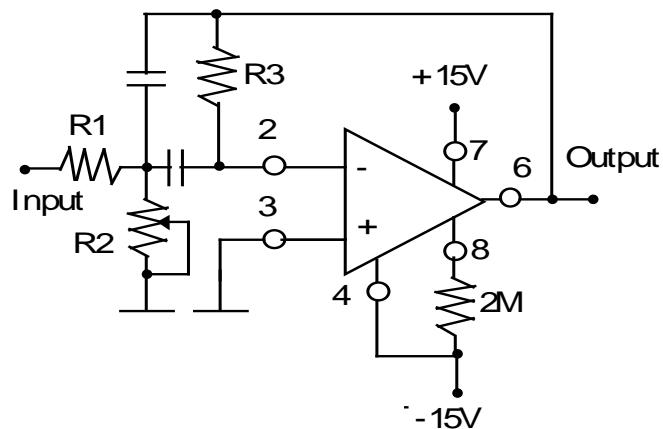
$T_A = -40^\circ \text{ to } 85^\circ \text{ C}$   
for all packages.

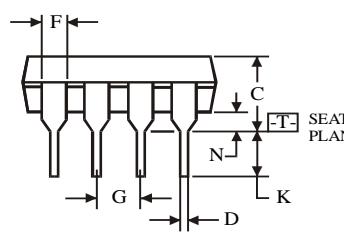
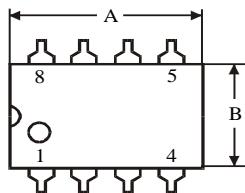
### FEATURES

- Supply Operation  $\pm 1,2 \text{ - } \pm 18 \text{ V}$
- Input Bias Current  $2\text{nA typ}$
- Input Offset Current  $0,7 \text{ nA typ}$
- Input Offset Voltage  $2 \text{ mV typ}$
- Large Signal Voltage Gain  $\geq 50 \text{ k V/V}$
- Low Current Drain
- Wide Programming Range
- Offset Null Capability
- Short Circuit Protection
- Internally Frequency Compensated for Unity Gain

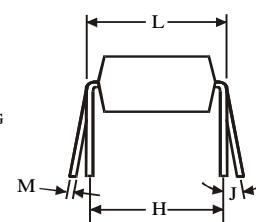


Multiple Feedback Bandpass Filter (1.0kHz)



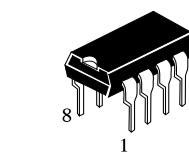
**N SUFFIX PLASTIC DIP  
(MS - 001BA)**


$\oplus 0.25$  (0.010)  $\ominus$  T

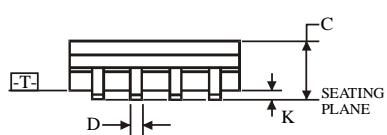
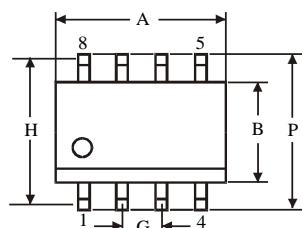

**NOTES:**

- Dimensions "A", "B" do not include mold flash or protrusions.

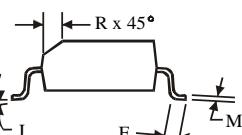
Maximum mold flash or protrusions 0.25 mm (0.010) per side.



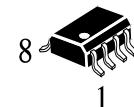
	Dimension, mm	
Symbol	MIN	MAX
A	8.51	10.16
B	6.1	7.11
C		5.33
D	0.36	0.56
F	1.14	1.78
G		2.54
H		7.62
J	0°	10°
K	2.92	3.81
L	7.62	8.26
M	0.2	0.36
N	0.38	

**D SUFFIX SOIC  
(MS - 012AA)**


$\oplus 0.25$  (0.010)  $\ominus$  T C  $\ominus$


**NOTES:**

- Dimensions A and B do not include mold flash or protrusion.
- Maximum mold flash or protrusion 0.15 mm (0.006) per side for A; for B - 0.25 mm (0.010) per side.



	Dimension, mm	
Symbol	MIN	MAX
A	4.8	5
B	3.8	4
C	1.35	1.75
D	0.33	0.51
F	0.4	1.27
G		1.27
H		5.72
J	0°	8°
K	0.1	0.25
M	0.19	0.25
P	5.8	6.2
R	0.25	0.5