

June, 1998 Preliminary

 AMI 0.8 micron CMOS
 CWL Double Poly

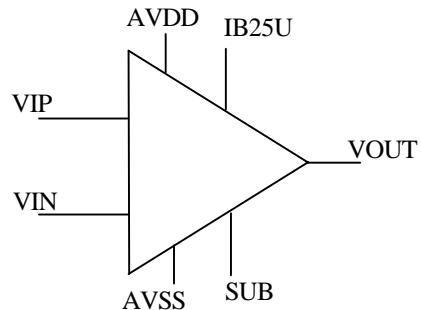
SINGLE-STAGE OP AMP

FEATURES

- Small layout.
- Good for driving capacitive load only.

DESCRIPTION

This is a simple single-stage folded-cascode opamp capable of driving capacitive loads up to 6pF with a GBW of 21MHz. Gain is 76dB.



PIN DESCRIPTION

NAME	TYPE	DESCRIPTION
VIP	Analog input	OpAmp positive input
VIN	Analog input	OpAmp negative input
IB25U	Analog input	Bias current input ($25\mu A \pm 43\%$ Sourcing)
VOUT	Analog output	OpAmp output
AVDD	Analog supply	+5V supply
AVSS	Analog supply	Ground
SUB	Substrate	Substrate

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	MIN	MAX	UNITS
VDD	Supply Voltage	4.4	5.5	V
T	Temperature	-40	105	°C
CLOAD	Load capacitance		6.0	pF
GAIN	Gain	75.9		dB
GBW	Gain bandwidth	21.4		MHz
PM	Phase Margin	67.0		degrees
GM	Gain margin	26.1		dB
VOS	Offset voltage		5.0	mV
IDC	DC current		461.5	uA
ICMR	Input Common Mode Range	2.25	2.75	V
OPR	Output Range	2.25	2.75	V