AMERICAN MICROSYSTEMS, INC

OP0001ES01

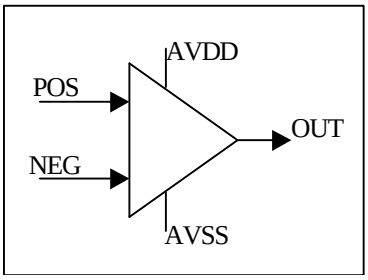
June, 1998 Preliminary

AMI 0.6 micron CMOS
C6L Double Poly

External Opamp

Features

- 85-112dB gain
- 0.1-1.6Mhz bandwidth
- 50-117 degrees phase margin (with series resistor)



Schematic Symbol

Description

opamp to drive relatively large capacitive load such as an LCD display (1000pf-2000pf)

PIN DESCRIPTION

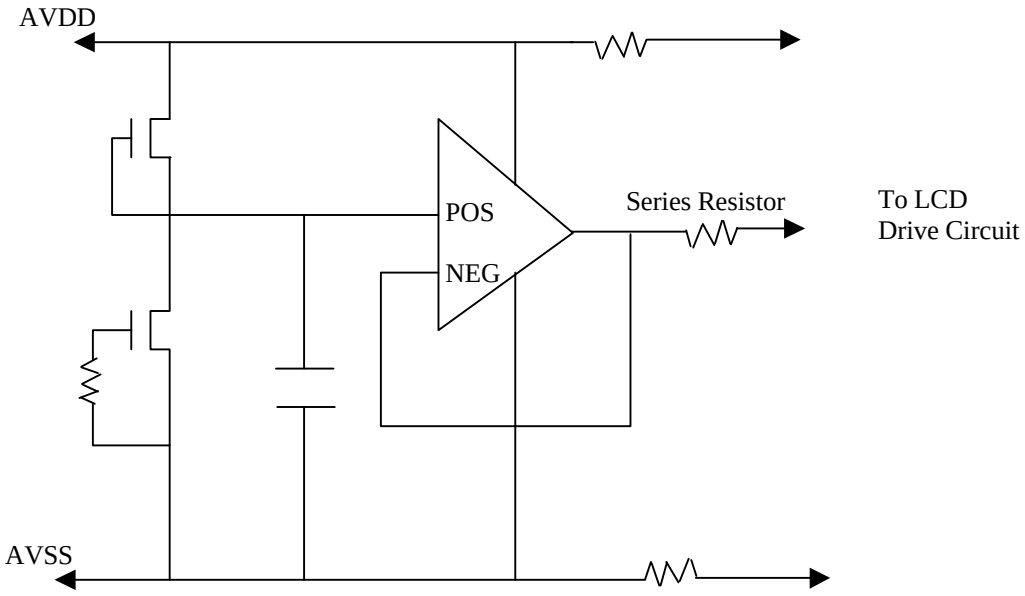
NAME	TYPE	DESCRIPTION
POS	Analog input	Positive opamp input
NEG	Analog input	Negative opamp input
AVDD	Analog supply	+5v supply
AVSS	Analog supply	Analog ground
OUT	Analog output	Opamp out

AC ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	Condition	MIN	TYP	MAX	UNITS
Vdd	Power Supply Voltage		4.5	5	5.5	V
Idc	Supply Current				150	µA
G	Open Loop Gain		85		112	db
Bw	Bandwidth		0.1		1.6	MHz
SRlh	Slew Rate low to high		2.6		3.0	V/mSec
SRhl	Slew Rate high to low		1.4		1.6	V/mSec
PM	Phase Margin *		50		117	degrees
T	Temperature		-40		125	°C
ICMR	Input Common Mode Range		AVSS+0.5		AVDD-2	V

***** With Series Resistor approx. 1.65K ohms

Example Circuit



3 Level Back Plane Drive Circuit