

RoHS Compliant Product
A suffix of "-C" specifies halogen or lead -free

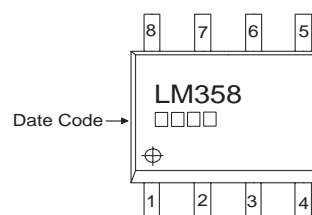
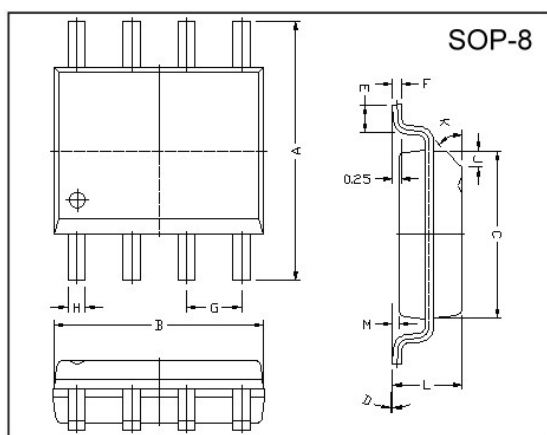
DESCRIPTION

The SGSCLM358 consists of two independent high gains, internally frequency compensated operational amplifier. It can be operated from a Single power supply and also split power supplies.

FEATURES

- Input Common-Mode Voltage Range Include Ground
- Large DC Voltage Gain
- Internally Frequency Compensated For Unity Gain
- Wide Power Supply Range 3V-32V

PACKAGE DIMENSIONS

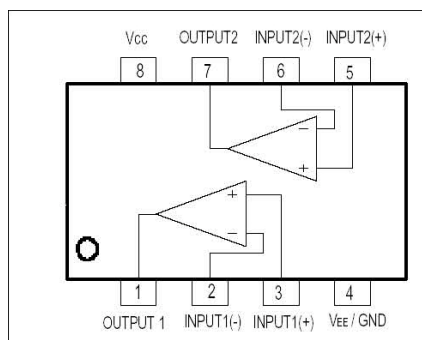


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.80	6.20	M	0.10	0.25
B	4.80	5.00	H	0.35	0.49
C	3.80	4.00	L	1.35	1.75
D	0	8	J	0.375 REF.	
E	0.40	0.90	K	45	
F	0.19	0.25	G	1.27 TYP.	

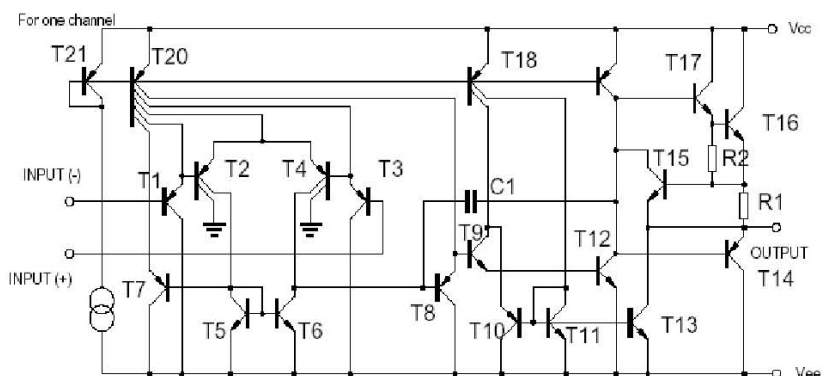
APPLICATIONS

- General Purpose Amplifier
- Transducer Amplifier

PIN CONFIGURATIONS



BLOCK DIAGRAMS



MAXIMUM RATINGS

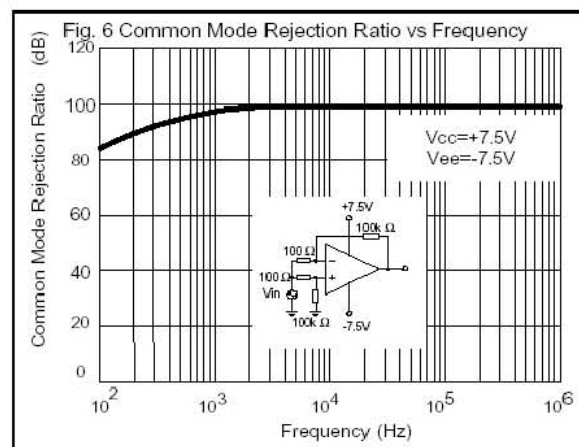
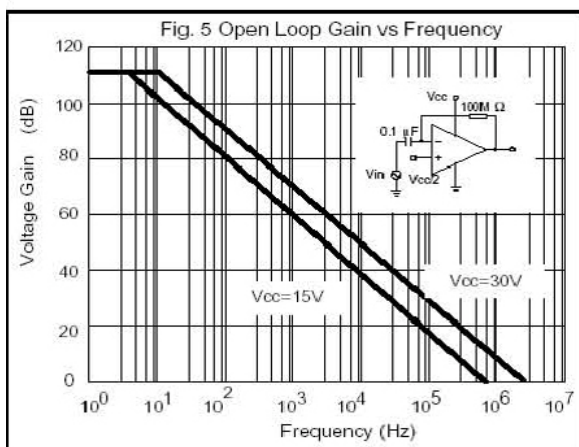
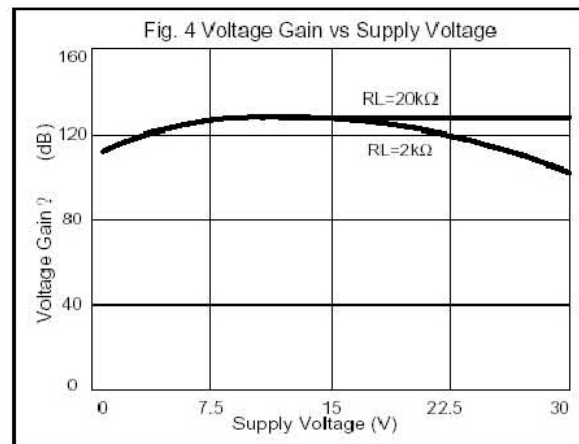
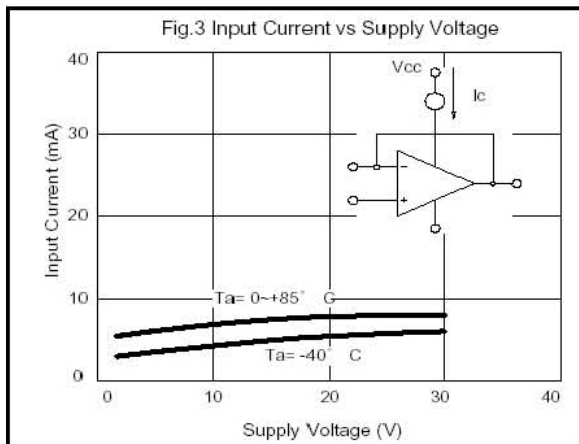
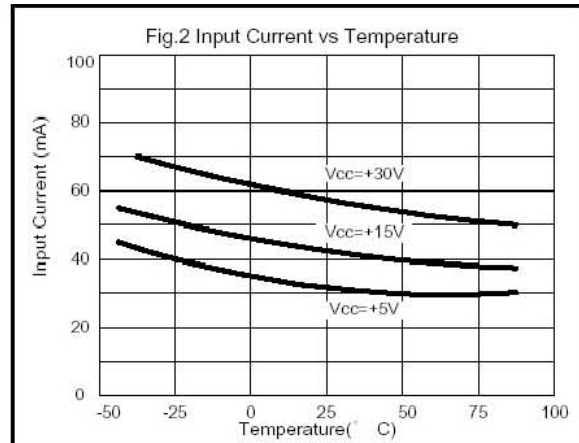
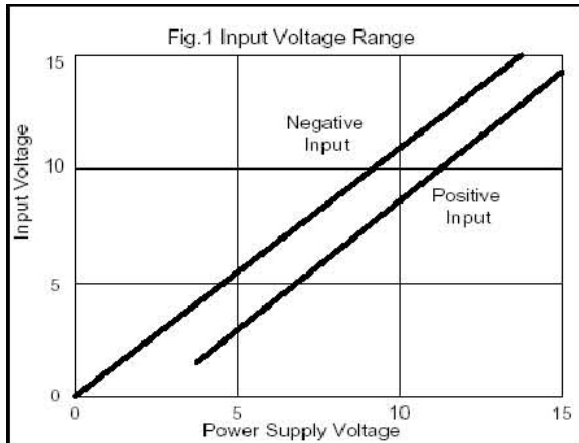
Parameter	Value	Units
Supply Voltage (V _{CC})	±16 or 32	V
Differential Input Voltage (V _{I(DIFF)})	±32	V
Input Voltage (V _I)	-0.3 ~+32	V
Output Short to Ground	Continuous	
Operating & Junction Temperature (T _{OPR} , T _{STG})	0~+70, -65~+150	°C

RECOMMENDED OPERATING CONDITIONS

(V_{CC}=5.0V V_{EE}=GND, T_A=25°C, unless otherwise specified)

Characteristics	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Input Offset Voltage	V _{IO}	-	2.9	7.0	mV	V _{CM} =0V to V _{CC} -1.5V V _{O(P)} =1.4V, R _S =0Ω
Input Offset Current	I _{IO}	-	5	50	nA	
Input Bias Current	I _{BIAS}	-	45	250	nA	
Input Common Mode Voltage	V _{I(R)}	0	-	V _{CC} -1.5	V	V _{CC} =30V
Power Supply Current	I _{CC}	-	0.8	2.0	mA	R _L =∞, V _{CC} =30V
		-	0.5	1.2	mA	R _L =∞, Full Temperature
Large Signal Voltage Gain	GV	25	100	-	V/mV	V _{CC} =15V, R _L >=2K V _{O(P)} =1V to 11V
Output Voltage Swing	V _{O(H)}	26	-	-	V	V _{CC} =30V, R _L =2KΩ
		27	28	-	V	V _{CC} =30V, R _L =10KΩ
	V _{O(L)}	-	5	20	mV	V _{CC} =5V, R _L >=10KΩ
Common Mode Rejection Ratio	CMRR	65	80	-	dB	
Power Supply Rejection Ratio	PSRR	65	100	-	dB	
Channel Separation	CS	-	120	-	dB	F=1KHZ to 20KHZ
Short Circuit Current to Ground	I _{SC}	-	40	60	mA	
Output Current	I _{SOURCE}	10	30	-	mA	V _{I(+)} = 1V, V _{I(-)} =0V V _{CC} =15V, V _{O(P)} =2V
		10	15	-	mA	V _{I(+)} =0V, V _{I(-)} =1V V _{CC} =15V, V _{O(P)} =2V
		12	100	-	μA	V _{I(+)} =0V, V _{I(-)} =1V V _{CC} =15V, V _{O(P)} =200mV
Differential Input Voltage	V _{I(DIFF)}	-	-	V _{CC}	V	

CHARACTERISTIC CURVE



CHARACTERISTIC CURVE (cont'd)

