

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Value	Unit
Supply Voltage	V _{CC}	±22	V
Differential input voltage	V _{I(DIFF)}	±18	V
Power Dissipation	P _D	400	mW
Input Voltage	V _I	±15	V
Operating Temperature	T _{OPR}	0~+70	°C
Storage Temperature	T _{STG}	-65~+150	°C

ELECTRICAL CHARACTERISTICS(T_a=25°C ,V_{CC}=15V,V_{EE}=-15V)

Characteristic	Symbol	Test Condition	Min	Typ.	Max	Unit
Supply Current	I _{CC}			3.5	5.6	mA
Input offset voltage	V _{IO}	R _S <10kΩ		2	6	mV
Input offset current	I _{IO}			5	200	nA
Input bias current	I _{BIAS}			30	500	nA
Large signal voltage gain	G _V	V _{O(p-p)} =10V,R _L <2kΩ	20	200		V/mV
Common Mode Input Voltage Range	V _{I(R)}		±12	±13		V
Common Mode Rejection Ratio	CMRR	R _S <10kΩ	70	90		dB
Supply Voltage Rejection Ratio	PSRR	R _S <10kΩ	76	90		dB
Output Voltage swing	V _{O(p-p)}	R _L >10kΩ		±12	±14	V
Power Consumption	P _C			70	170	mW
Slew Rate	SR	V _i =10V,R _L >2kΩ,C _L <100pF	1.2			V/μs
Rise Time	T _{RISE}	V _i =20mV,R _L >2kΩ, C _L <100pF		0.3		μs
Overshoot	OS	V _i =20mV,R _L >2kΩ,C _L <100pF		15		%

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Positive output voltage swing vs Load resistance

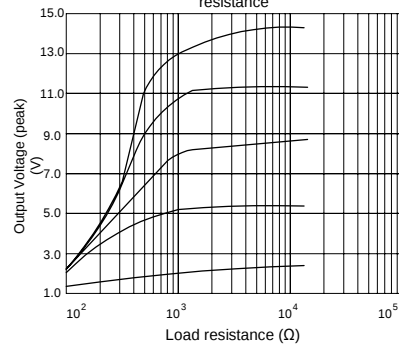


Fig.2 Positive output voltage swing vs Load resistance

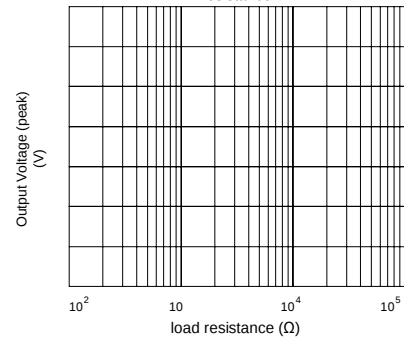
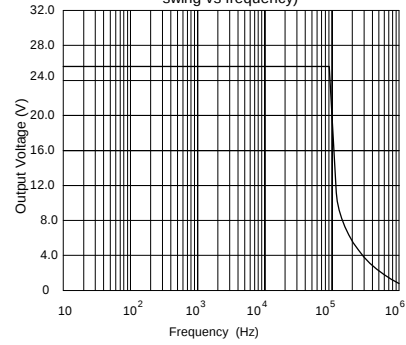


Fig.3 Power bandwidth (large signal swing vs frequency)



LINEAR INTEGRATED CIRCUIT

TYPICAL PERFORMANCE CHARACTERISTICS

Fig.1 Positive output voltage swing vs Load resistance

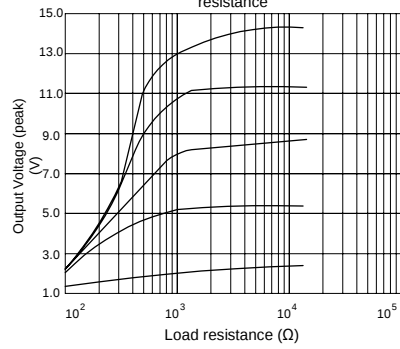


Fig.2 Positive output voltage swing vs Load

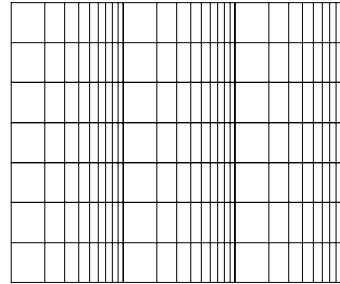


Fig.3 Power bandwidth (large signal swing vs frequency)

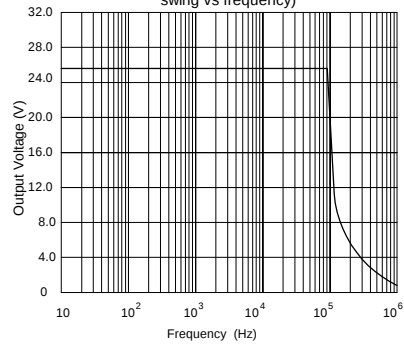


Fig. 4 Burst Noise vs Rs

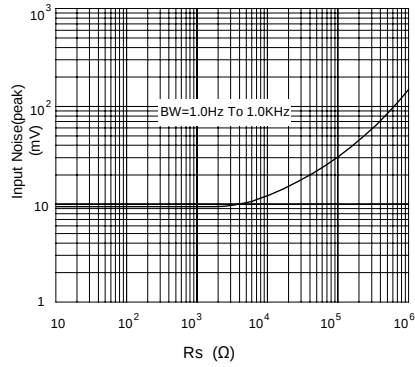


Fig. 5 RMS Noise vs Rs

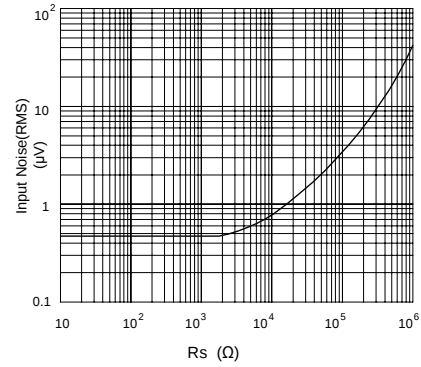


Fig. 6 Output Noise vs Rs

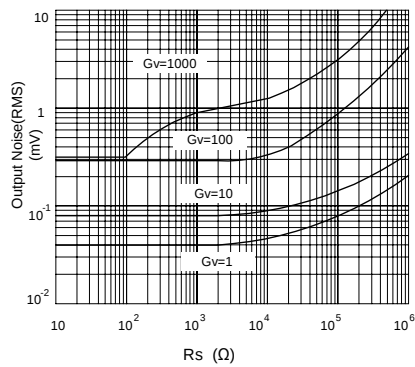


Fig. 7 Spectral Noise Density

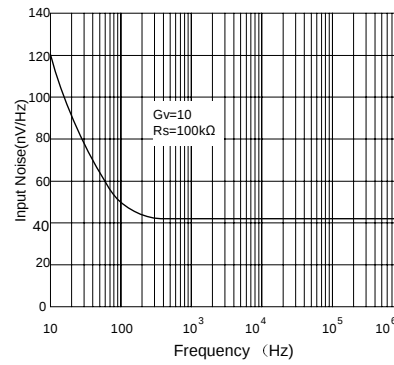


Fig. 8 Open loop frequency response

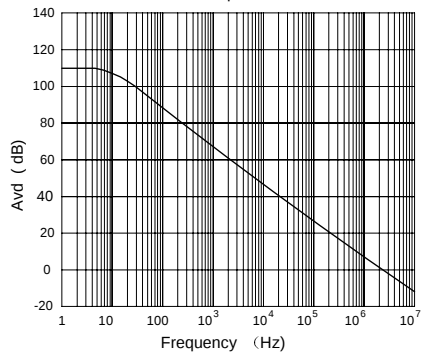
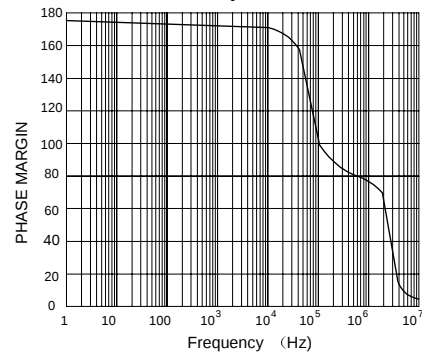


Fig. 9 PHASE MARGIN vs FREQUENCY

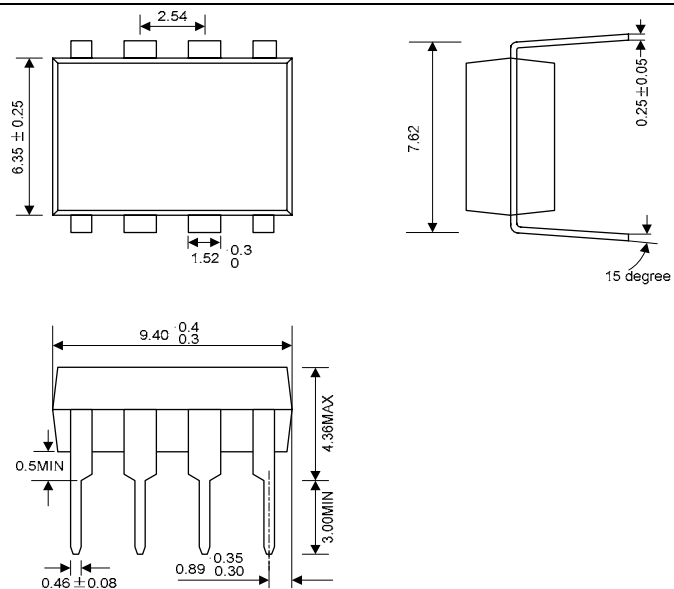


YG4558/E/L

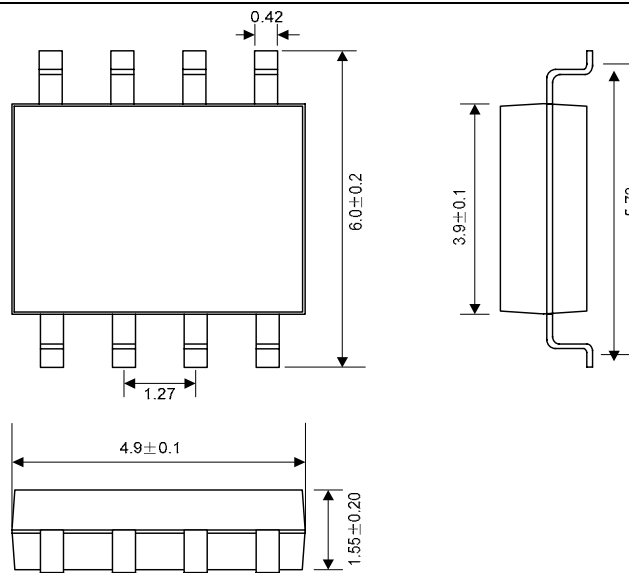
LINEAR INTEGRATED CIRCUIT

PACKAGE DIMENSIONS

DIP-8-300-2.54



SOP-8-225-1.27

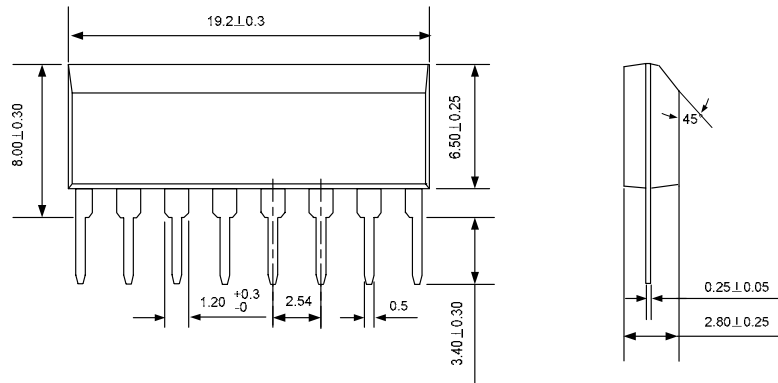


YG4558/E/L

LINEAR INTEGRATED CIRCUIT

SIP-8-2.54

UNIT: mm



Attach**Revision History**

Data	REV	Description	Page
	1.0	Original	
2003.10.23	1.1	Add "OREDING INFORMATION"	1
2005.3.17	1.2	Change "UTC4558 To UTC4558/E"	1
		Revise "Package Dimensions"	5
2009.11.10	1.3	Add "SIP-8-2.54" 1,6	