

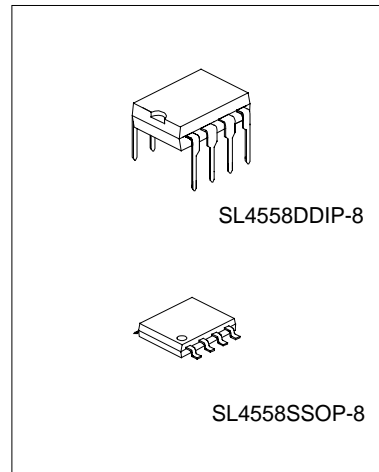
DUAL OPERATIONAL AMPLIFIER

DESCRIPTION

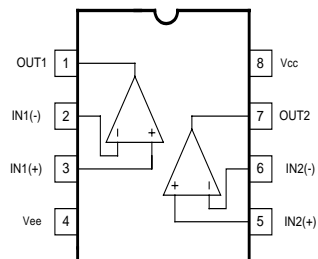
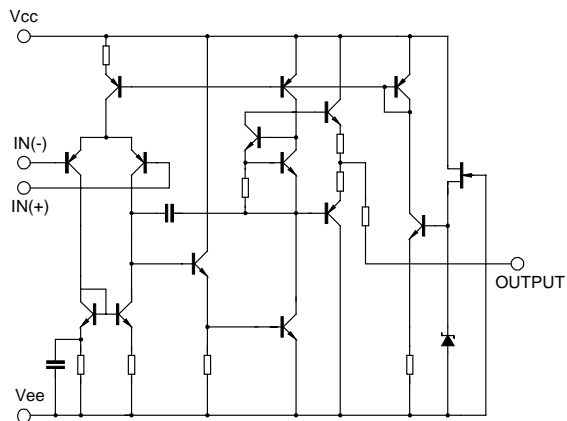
The SL4558 is a monolithic integrated circuit designed for dual operational amplifier.

FEATURES

- *No frequency compensation required.
- *No latch-up
- *Large common mode and differential voltage range
- *Parameter tracking over temperature range
- *Gain and phase match between amplifiers
- *Internally frequency compensated
- *Low noise input transistors



BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Value	Unit
Supply Voltage	V _{CC}	± 16	V
Differential input voltage	V _{I(DIFF)}	±16	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(Ta=25°C ,Vcc=15V,Vee=-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	mV
Slew Rate	SR	V _i =10V,R _L >2kΩ,C _L <100pF	1.2			V/μs
Rise Time	T _{RIS}	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

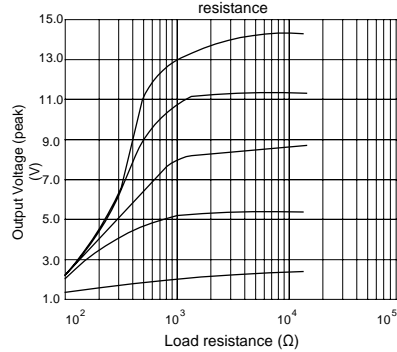


Fig.2 Positive output voltage swing vs Load resistance

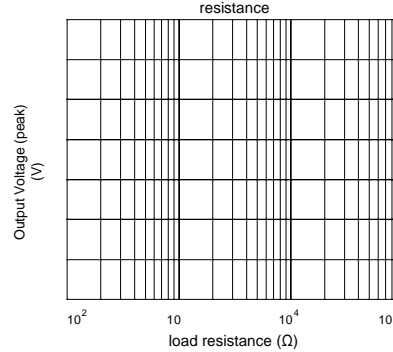


Fig.3 Power bandwidth (large signal swing vs frequency)

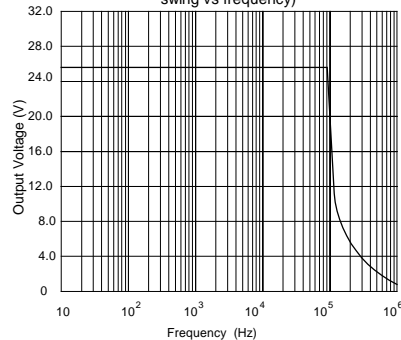


Fig. 4 Burst Noise vs Rs

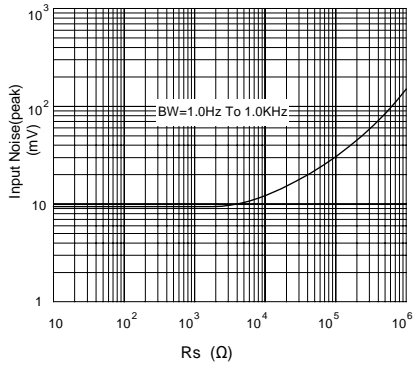


Fig. 5 RMS Noise vs Rs

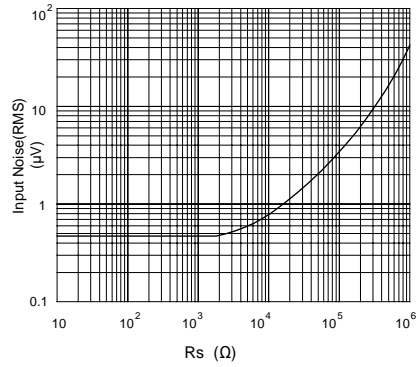


Fig. 6 Output Noise vs Rs

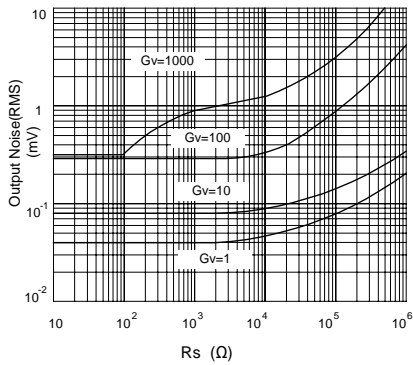


Fig. 7 Spectral Noise Density

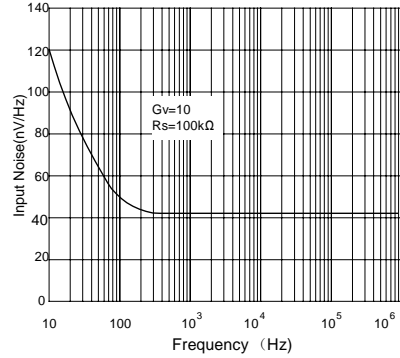


Fig. 8 Open loop frequency response

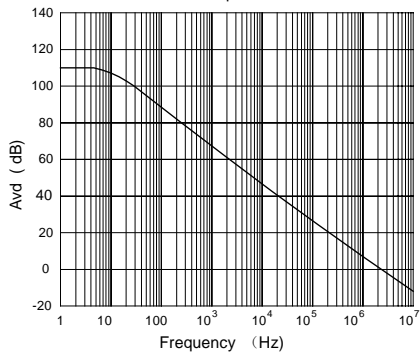
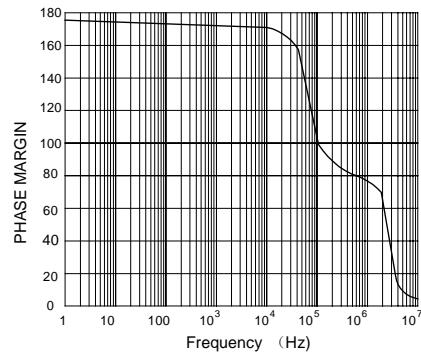
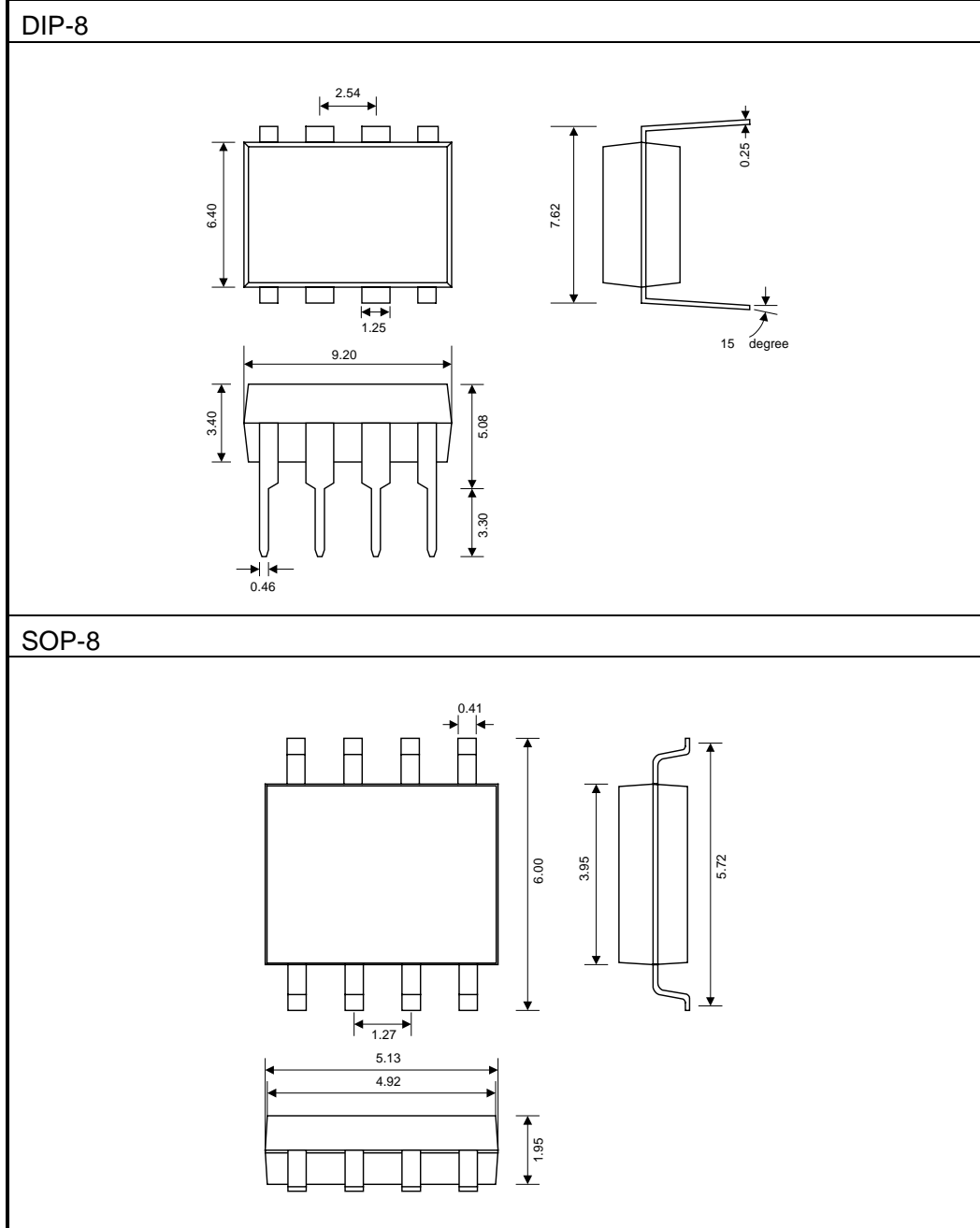


Fig. 9 PHASE MARGIN vs FREQUENCY



PACKAGE DIMENSIONS



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Operational Amplifiers - Op Amps](#) category:

Click to view products by [SLKORMICRO](#) manufacturer:

Other Similar products are found below :

[430227FB](#) [UPC451G2-A](#) [UPC824G2-A](#) [LT1678IS8](#) [UPC258G2-A](#) [NCV33202DMR2G](#) [NJM324E](#) [NTE925](#) [AZV358MTR-G1](#)
[AP4310AUMTR-AG1](#) [AZV358MMTR-G1](#) [SCY33178DR2G](#) [NCV5652MUTWG](#) [NCV20034DR2G](#) [NTE778S](#) [NTE871](#) [NTE937](#)
[MCP6V16UT-E/OT](#) [SCY6358ADR2G](#) [UPC4570G2-E1-A](#) [NCS20282FCTTAG](#) [UPC834G2-E1-A](#) [UPC1458G2-E2-A](#) [UPC813G2-E2-A](#)
[UPC458G2-E1-A](#) [UPC824G2-E2-A](#) [UPC4574G2-E2-A](#) [UPC4558G2-E2-A](#) [UPC4560G2-E1-A](#) [UPC4062G2-E1-A](#) [UPC258G2-E1-A](#)
[UPC4742GR-9LG-E1-A](#) [UPC4742G2-E1-A](#) [UPC832G2-E2-A](#) [UPC842G2-E1-A](#) [UPC802G2-E1-A](#) [UPC4741G2-E2-A](#) [UPC4572G2-E2-A](#)
[UPC844GR-9LG-E2-A](#) [UPC259G2-E1-A](#) [UPC4741G2-E1-A](#) [UPC4558G2-E1-A](#) [UPC4574GR-9LG-E1-A](#) [UPC1251GR-9LG-E1-A](#)
[UPC4744G2-E1-A](#) [UPC4092G2-E1-A](#) [UPC4574G2-E1-A](#) [UPC4062G2-E2-A](#) [UPC451G2-E2-A](#) [UPC832G2-E1-A](#)