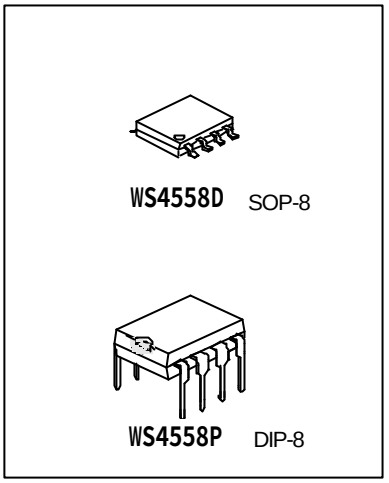
WS4558

LINEAR INTEGRATED CIRCUIT

DUAL OPERATIONAL AMPLIFIER



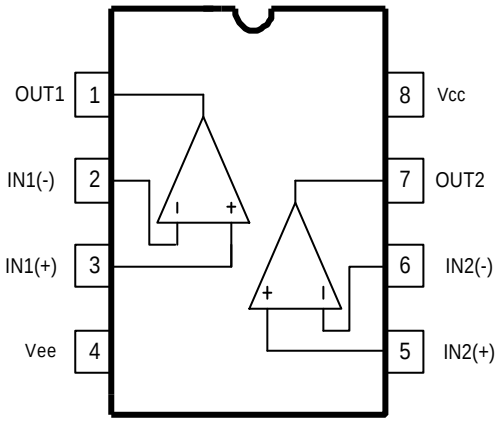
DESCRIPTION

The WS4558 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

PIN CONFIGURATIONS



Order Number:
WS4558P DIP8
WS4558D SO8

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	Vcc	+-22	V
Differential input voltage	$V_{I(DIFF)}$	+-18	V
Power Dissipation DIP-8	P_D	600	mW
SOP-8	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)

PARAMETER	SYMBOL	TEST CONDUCTION	MIN	TYP	MAX	UNIT
Supply Current, all Amp, no load	Icc			3.5	5.8	mA
Input offset voltage	V_{IO}	Rs<10kΩ		2	6	mV
Input offset current	I_{IO}			5	200	nA
Input bias current	I_{BIAS}			30	500	nA
Large signal voltage gain	Gv	Vo(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	Rs<=10kΩ	70	90		dB
Supply Voltage Rejection Ratio	PSRR	Rs<=10kΩ	76	90		dB
Output Voltage swing	Vo(p-p)	R_L>=10kΩ	+-12	+-14		V
Power Consumption	Pc			70	170	mV
Slew Rate	SR	Vi=+-10V,R_L>=2kΩ, C_L<=100pF	1.2	2.2		V/μs
Rise Time	T_{RIS}	Vi=+-20mV,R_L>=2kΩ, C_L<=100pF		0.3		μs
Overshoot	OS	Vi=+-20mV,RL>=2kΩ, C_L<=100pF		15		%
Input Resistance	Ri		0.3	2		MΩ
Output Resistance	Ro			75		Ω
Total Harmonic Distortion	THD	f=1kHz,Av=20dB, RL=2kΩ, Vo=2Vpp, CL=100pF		0.008		%
Channel Separation	Vo1/Vo2			120		dB