

DUAL OPERATIONAL AMPLIFIER—YD4558

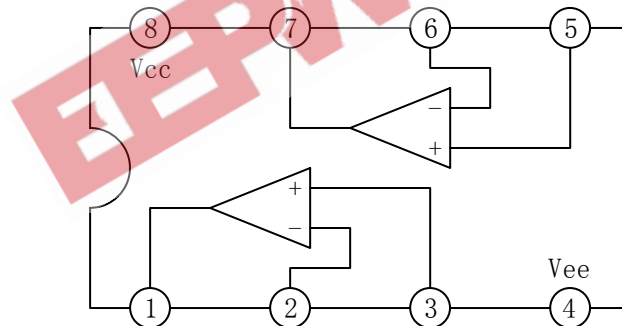
DESCRIPTION

The YD4558 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 cover temperature range
- *Gain and phase match between amplifiers
- *Internally frequency compensated
- *Low noise input transistors ($V_{in}=2.5 \mu V$)

BLOCK DIAGRAM



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ABSOLUTE MAXIMUM RATINGS (Tamb=25°C)

PARAMETER		SYMBOL	VALUE	UNIT
Supply Voltage		V _{CC}	± 18	V
Differential Input Voltage		V _{I(DIFF)}	± 30	V
Power Dissipation	DIP8	P _D	500	mW
	SOP8		250	
Input Voltage		V _I	± 15	V
Operating Temperature		T _{opr}	-20~+75	°C
Storage Temperature		T _{stg}	-40~+125	°C

ELECTRICAL CHARACTERISTICS

(V_{CC}=15V, V_{EE}=-15V, Tamb=25°C, Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Supply Current	I _{CC}			4.0	6.0	mA
Input Offset Voltage	V _{IO}	R _s < 10k Ω		0.5	6	mV
Input Offset Current	I _{IO}			5	200	nA
Input Bias Current	I _{BIAS}			25	500	nA
Large Signal Voltage Gain	A _{VO}	V _{o(p-p)} =10V, R _L < 2k Ω	86	100		dB
Common Mode Input Voltage Range	V _{ICM}		± 12	± 14		V
Common Mode Rejection Ratio	K _{CMR}	R _s < 10k Ω	70	90		dB
Supply Voltage Rejection Ratio	K _{SVR}	R _s < 10k Ω	76.5	90		dB
Output Voltage Swing	V _{o(p-p)}	R _s > 10k Ω		± 12	± 14	V
Slew Rate	SR	V _i =20mV, R _L > 2k Ω, C _L < 100p		1.0		V/μs
Rise Time	T _{RISE}	V _i =20mV, R _L > 2k Ω, C _L < 100p		0.3		μs
Overshoot	OS	V _i =20mV, R _L > 2k Ω, C _L < 100p		15		%

