DUAL OPERATIONAL AMPLIFIER—YD4556

DESCRIPTION

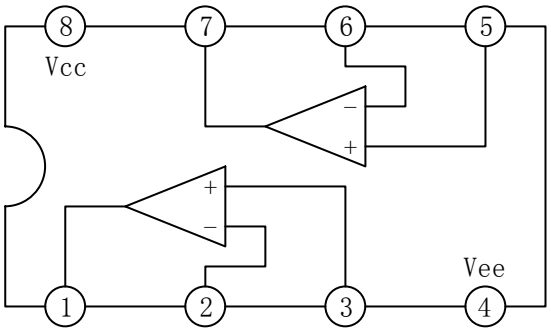
The YD4556 integrated circuit is a high-gain, high output current dual operational amplifier capable of driving ±70mA into 150Ω loads (±10.5V output voltage),and operating low supply voltage (Vcc/Vee=±2V).

The YD4556 combines many of the features of the popular YD4558 as well as having the capability of driving 150Ω loads. In addition, the wide band-width, low noise, high slew rate and low distortion of the YD4556 make it ideal for many audio, telecommunications and instrumentation application.

FEATURES

*Operating Voltage (±2V～±18V)
*High Output Current (I_O=70mA)
*Slew Rate (3V/μs typ.)
*Gain Band Width Product (8MHz typ.)
*Package Outline： DIP8, SOP8
*Bipolar Technology

BLOCK DIAGRAM



WuXi YouDa Electronics Co., Ltd

Add: No.5 Xijin Road, National Hi-Tech Industrial Development Zone, Wuxi Jiangsu China

Tel: 86-510-85205117 86-510-85205106 Fax: 86-510-85205110 Website: www.e-youda.com

SHENZHEN OFFICE Tel： 86-755-83740369 Fax： 86-755-83741418

ABSOLUTE MAXIMUM RATINGS (Tamb=25℃)

PARAMETER		SYMBOL	VALUE	UNIT
Supply Voltage		Vcc	±18	V
Differential Input Voltage		$V_{I(DIFF)}$	±30	V
Power Dissipation	DIP8	P_D	700	mW
	SOP8		250	
D terminal Output Voltage		V_I	±15	V
Operating Temperature		Topr	-20～+75	℃
Storage Temperature		Tstg	-40～+150	℃

ELECTRICAL CHARACTERISTICS

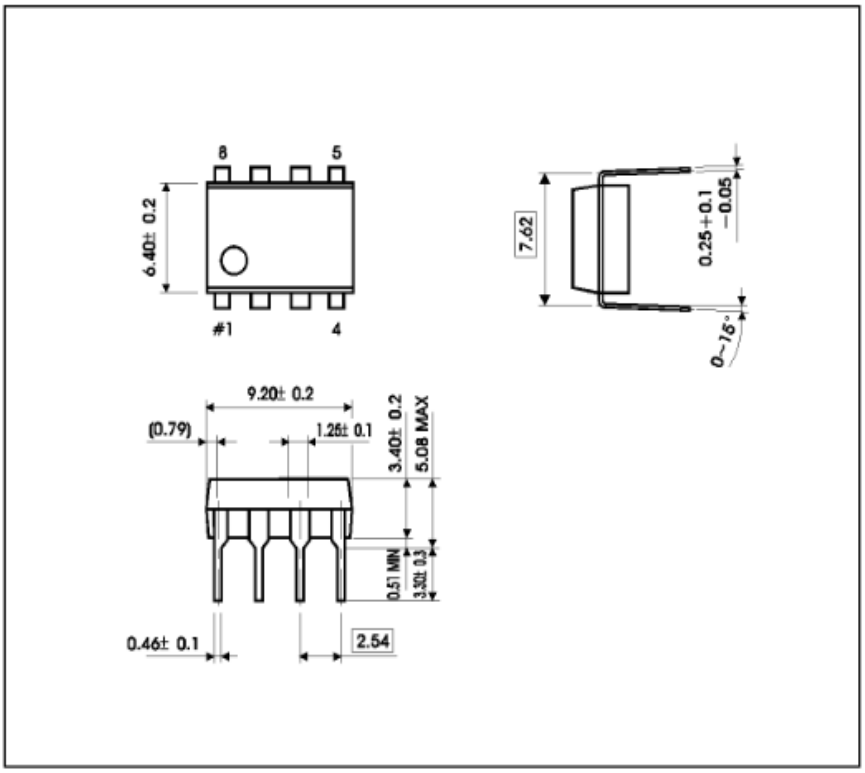
(Vcc=15V, Vee=-15V, Tamb=25℃, Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Operating Current	I_{CC}			9.0	12.0	mA
Input Offset Voltage	V_{IO}	R_S≤10kΩ		0.5	6.0	mV
Input Offset Current	I_{IO}			5	60	nA
Input Bias Current	I_{BIAS}			50	500	nA
Input Resistance	R_{IN}		0.3	5		MΩ
Large Signal Voltage Gain	Avo	Vo=±10V，R_L≥2kΩ	86	100		dB
Common Mode Input Voltage Range	V_{ICM}		±13.5	±14		V
Common Mode Rejection Ratio	K_{CMR}	R_S≤10kΩ	70	90		dB
Supply Voltage Rejection Ratio	K_{SVR}	R_S≤10kΩ	76.5	90		dB
Maximum Output Voltage Swing 1	V_{OM1}	R_L≥2kΩ	±12	±13.5		V
Maximum Output Voltage Swing 2	V_{OM2}	R_L≥150Ω	±10.5	±11		V
Slew Rate	SR	A_V=1，R_L=2kΩ		3		V/μs
Gain Bandwidth Product	GB			8		MHz

OUTLINE DRAWING

DIP-8

unit:mm



SOP-8

unit:mm