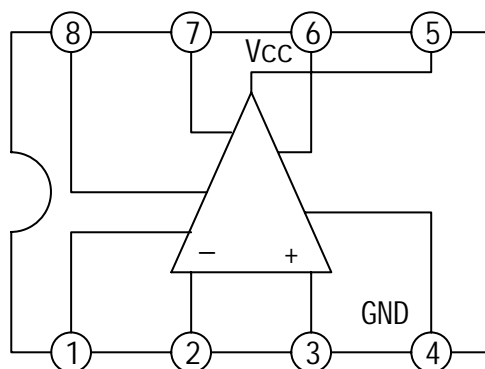


**LOW VOLTAGE AUDIO POWER AMPLIFIER****——YD386****DESCRIPTION**

The YD386 is a power amplifier, designed for use in low voltage consumer applications. The gain is internally set to 20 to keep the external part count low. But the additional of an external resistor and capacitor between pin 1 and pin 8 will increase the gain to any value up to 200.

**FEATURES**

- \*Minimum external parts;
- \*Wide supply voltage range: 4V~12V;
- \*Voltage gains:20~200;
- \*Ground referenced input;
- \*Low distortion .

**BLOCK DIAGRAM****WuXi YouDa Electronics Co., Ltd**

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**ABSOLUTE MAXIMUM RATINGS** (Tamb=25 )

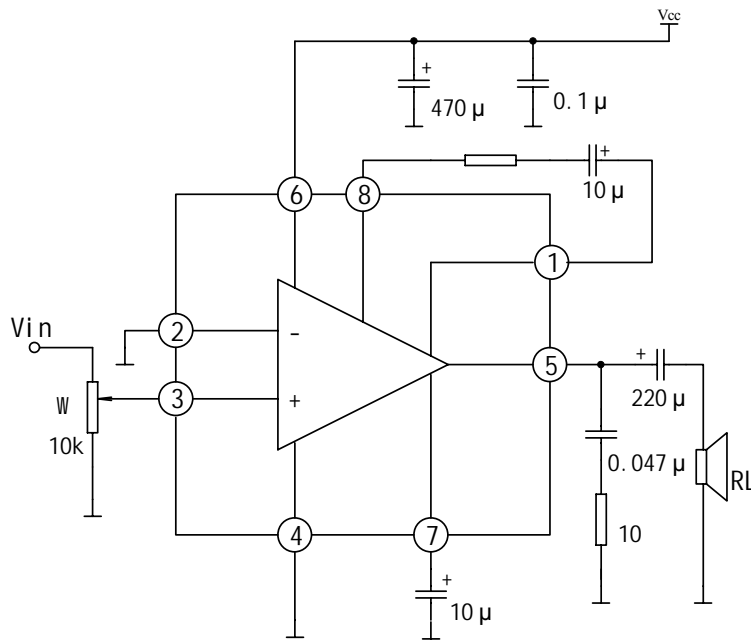
PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V <sub>cc</sub>	15	V
Power Dissipation	P <sub>D</sub>	1250	mW
Input Voltage	V <sub>i</sub>	0.4V	V
Operating Temperature	T <sub>opr</sub>	0 to +70	
Storage Temperature	T <sub>stg</sub>	-65 to +150	

**ELECTRICAL CHARACTERISTIC**

(Tamb=25 ,all voltage referenced to GND Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	NIN	TYP	MAX	UNIT
Supply Voltage	V <sub>cc</sub>		4		12	V
Quiescent Circuit Current	I <sub>ccq</sub>	V <sub>i</sub> =0		4	8	mA
Output Power	P <sub>o</sub>	V <sub>cc</sub> =6V, THD=10%	250	325		mW
		V <sub>cc</sub> =9V, THD=10%	500	700		
Voltage Gain	G <sub>v</sub>	Pin1 and Pin 8 open		26		dB
		10 μ F Fron pin1 and pin8		46		
Gain Bandwidth	BW	Pin1 and Pin 8 open		300		kHz
		10 μ F Fron pin1 and pin8		60		
Total harmonic distortion	THD	P <sub>o</sub> =125mW, Pin1 and Pin 8 open		0.2		%
Supply Voltage Rejection	RR	10 μ F Fron pin7 and GND		50		dB
Input Resistance	Z <sub>i</sub>			50		kΩ
Input Bias current	I <sub>B</sub>	Pin2 and Pin 3 open		250		nA

APPLICATION CIRCUIT



OUTLINE DRAWING

DIP-8

unit:mm

