

## 5 BAND GRAPHIC EQUALIZER—YD3600

### DESCRIPTION

YD3600 is 5-Band graphic equalizer IC, consisting of 5 resonance circuit and an output buffer amplifier.

### FEATURE

\*Few external parts;

\*Low distortion: THD=0.007%(Typ.)

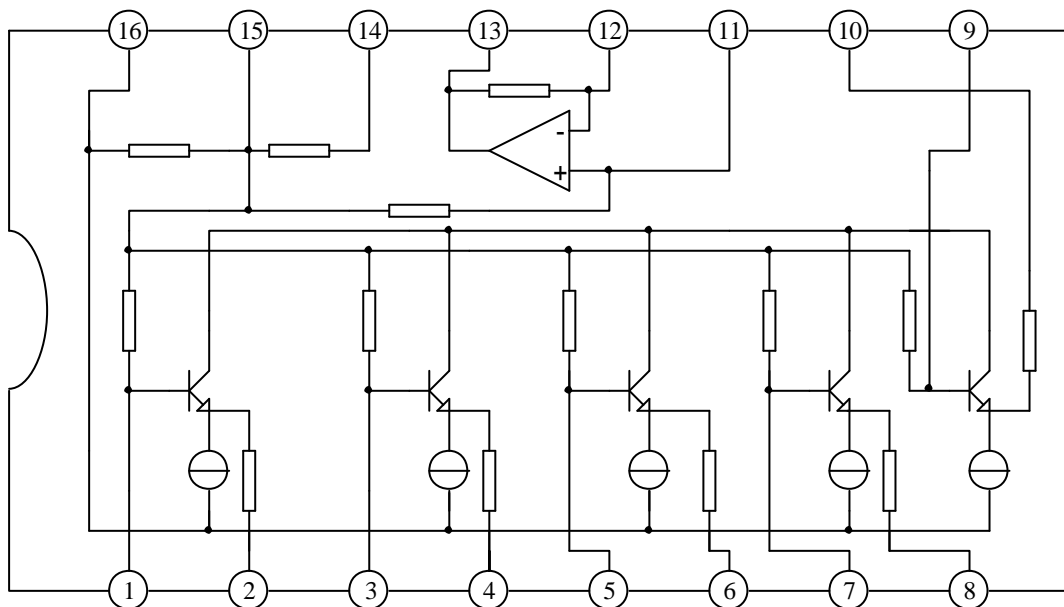
[  $V_o=0.245V(-10dBm)$ ,  $f=1.1kHz$ ,  $BW=20\sim 20kHz$ , FLAT ] ;

\*Low noise:  $V_{NO}=3.0\mu V$ (Typ.)

( $R_g=620\Omega$ ,  $V_i=0$ ,  $PFB=20\sim 20kHz$ , FLAT);

\*Wide operating supply voltage range:  $V_{cc}=4.0\sim 16V$ .

### BLOCK DIAGRAM



### WuXi YouDa Electronics Co., Ltd

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

Tel: 86-510-5205117 86-510-5205108 Fax: 86-510-5205110 Website: www.e-youda.com

SHENZHEN OFFICE Tel: 86-755-83740369 13823533350 Fax: 86-755-83741418

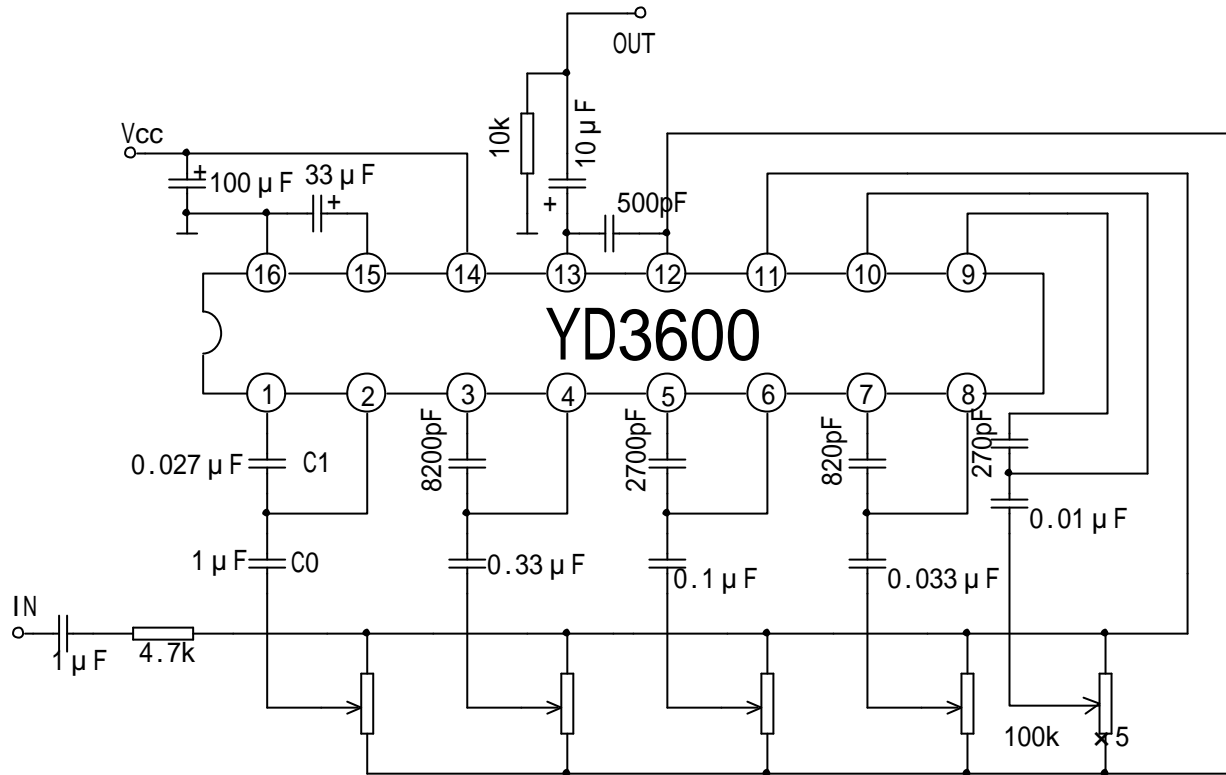
**ABSOLUTE MAXIMUM RATINGS** ( $T_{amb}=25$  )

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V <sub>cc</sub>	16	V
Power Dissipation	P <sub>D</sub>	750	mW
Operating Temperature	T <sub>amb</sub>	-30 ~ +75	
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	

**ELECTRICAL CHARACTERISTICS**(Unless otherwise specified, V<sub>cc</sub>=8V, f=1.1kHz, R<sub>L</sub>=10k , T<sub>amb</sub>=25 )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Current	I <sub>ccq</sub>	V <sub>i</sub> =0	3.5	6.1	9.3	mA
Voltage Gain (FLT)	G <sub>v1</sub>	V <sub>o</sub> =0.775V(0dBm)	-2.5	-0.5	1.5	dB
Voltage Gain (BST)	G <sub>v2</sub>	V <sub>o</sub> =0.775V(0dBm) f : 110Hz、 340Hz、 1.1kHz、 3.4kHz、 11kHz	10.0	11.5	14.0	
Voltage Gain (CUT)	G <sub>v3</sub>	V <sub>o</sub> =0.775V(0dBm) f : 110Hz、 340Hz、 1.1kHz、 3.4kHz、 11kHz	-14.0	-11.5	-10.0	
Total Harmonic Distortion	THD	V <sub>o</sub> =0.245V(-10dBm)		0.007	0.10	%
Output Noise Voltage	V <sub>NO</sub>	R <sub>g</sub> =620 , V <sub>in</sub> =0, BW=20 ~ 20kHz		3.0	8.0	μV

APPLICATION CIRCUIT



OUTLINE DRAWING

DIP-16

unit:mm

