

DUAL EQUALIZER AMPLIFIER

— YD3161

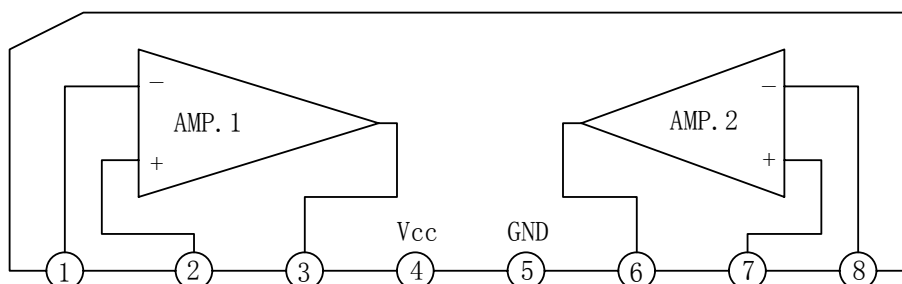
DESCRIPTION

YD3161 is 2-Channel Preamplifier For Car Stereo

FEATURES

- On-chip 2 preamplifiers.
- Good ripple rejection owing to on-chip voltage regulator.
- Minimum number of external parts required.
- Low noise.
- 8-pin SIP package facilitating easy mounting.

BLOCK DIAGRAM



OUTLINE FUNCTION

PIN	Name	Function	PIN	Name	Function
1	NF1	Feedback 1	5	GND	GND
2	IN1	Input 1	6	OUT2	Output 2
3	OUT1	Output 1	7	IN2	Input 2
4	Vcc	Vcc	8	NF2	Feedback 2

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

YOU DA INTEGRATED CIRCUIT

YD3161

ABSOLUTE MAXIMUM RATINGS ($T_{amb}=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V_{CC}	18	V
Power Dissipation	P_D	200	mW
Operating Temperature	T_{opr}	-20~+75	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40~+125	$^{\circ}\text{C}$

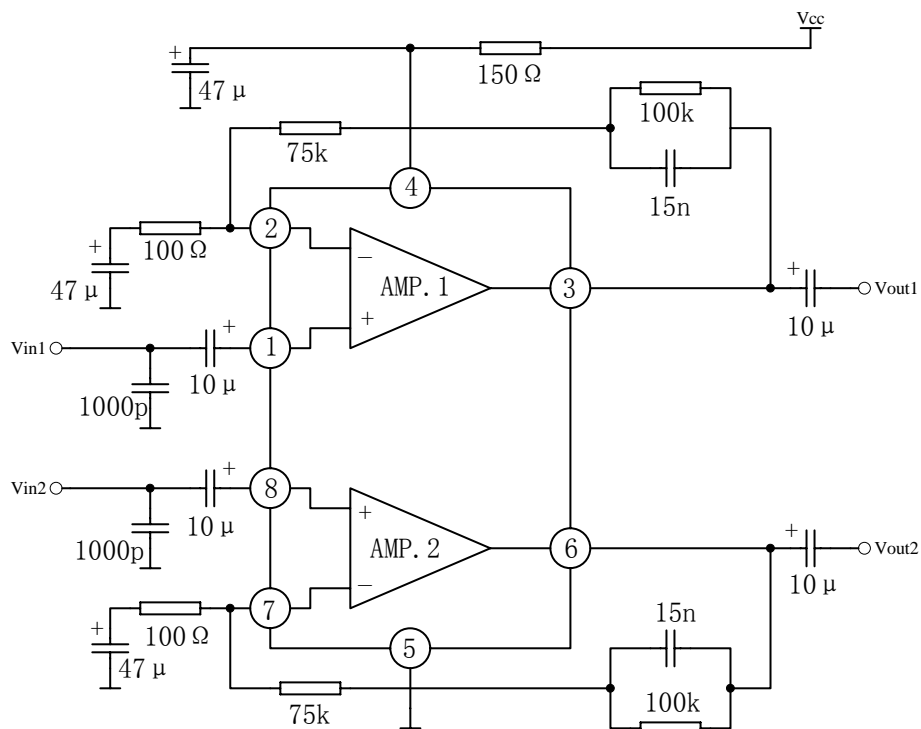
Recommended Operating Conditions ($T_{amb}=25^{\circ}\text{C}$)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V_{CC}	9	V
Load Resistance	R_L	10k	Ω

ELECTRICAL CHARACTERISTICS($T_{amb}=25^{\circ}\text{C}$, $V_{CC}=9\text{V}$, $f=1\text{kHz}$, $R_L=10\text{k}\Omega$, $R_g=600\Omega$, Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Quiescent Current	I_{ccq}	$V_i=0$		6.5	8.0	mA
Open Loop Voltage Gain	G_{vo}	$V_o=0.775\text{V}$	70	78		dB
Closed Loop Voltage Gain	G_v	$V_o=0.775\text{V}$		35		dB
Output Voltage	V_o	THD=1%	1.0	1.3		V
Total Harmonic Distortion	THD	$V_o=0.5\text{V}$		0.05	0.30	%
Input Resistance	Z_i		70	100		$\text{k}\Omega$
Input Noise Voltage	V_{Ni}	$R_g=2.2\text{k}\Omega$, $BW=20\text{Hz}\sim 20\text{kHz}$		1.2	2.0	μV
Cross Talk	CT	$R_g=2.2\text{k}\Omega$,	-50	-65		dB
Ripple Rejection	R.R			-40		dB

APPLICATION CIRCUIT



OUTLINE DRAWING

