

TA2078P

PRESET EQUALIZER IC

TA2078P is a 3 mode preset equalizer IC.

This IC have built-in one middle boost and two type high / low boost equalizers and flat mode.

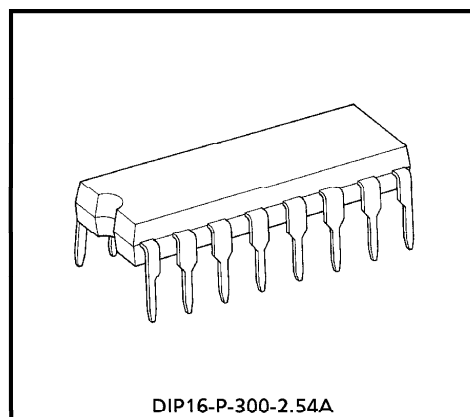
These operation mode are controled by internal switch.

FEATURES

- Dual channel
- 3 mode preset equalizer
 - 1) Middle boost
 - 2) High / Low boost-1
 - 3) High / Low boost-2
 - 4) Flat (No equalizing)
- Few external parts
- Two type package

TA2078P : Dual inline package 16pin
(Under Development)

- Operating supply voltage range
: $V_{CC(opr)} = 7.5 \sim 14.0V$ ($T_a = 25^\circ C$)



Weight : 1.00g (Typ.)

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MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	14	V
Power Dissipation	P_D (Note)	750	mW
Operating Temperature	T_{opr}	$-25 \sim 75$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

(Note) Derated above $T_a = 25^\circ\text{C}$, $6\text{mW}/^\circ\text{C}$ for TA2078P.

ELECTRICAL CHARACTERISTICS

(Unless otherwise specified, $V_{CC} = 10\text{V}$, $R_g = 620\Omega$, $R_L = 10\text{k}\Omega$, $f = 1\text{kHz}$, Normal Mode, $T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Operating Voltage	V_{CC}	—	—	7.5	—	14.0	V
Quiescent Current	I_{CCQ1}	—	NORMAL mode ($A = L, B = L$)	—	2.5	5.0	mA
	I_{CCQ2}	—	ROCK mode ($A = H, B = L$)	—	4.2	9.0	
	I_{CCQ3}	—	CLASSIC mode ($A = L, B = H$)	—	4.6	9.0	
	I_{CCQ4}	—	POP mode ($A = H, B = H$)	—	4.5	9.0	
Voltage Gain	G_v	—	—	12.0	14.0	16.0	dB
Maximum Output Voltage	V_{om}	—	THD = 1%	2.5	3.0	—	V_{rms}
Total Harmonic Distortion	THD	—	$V_{in} = 200\text{mV}_{rms}$	—	0.01	0.1	%
Ripple Rejection Ratio	R.R.	—	$V_{rip} = 300\text{mV}_{rms}$, $f_{rip} = 100\text{Hz}$	—	-56	—	dB
Cross Talk	C.T.	—	$V_{in} = 350\text{mV}_{rms}$	—	-70	-60	dB
Output Noise Voltage	V_{no}	—	$R_g = 620\Omega$, DIN AUDIO filter	—	20	30	μV_{rms}

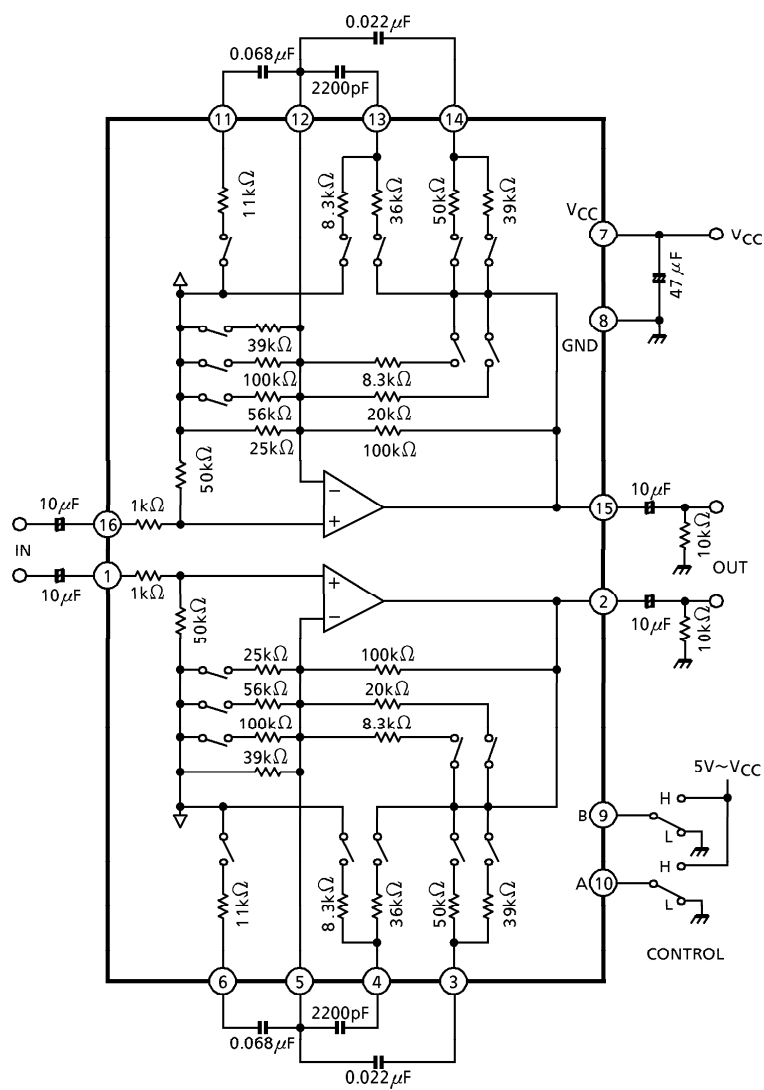
CONTROL SWITCH VOLTAGE

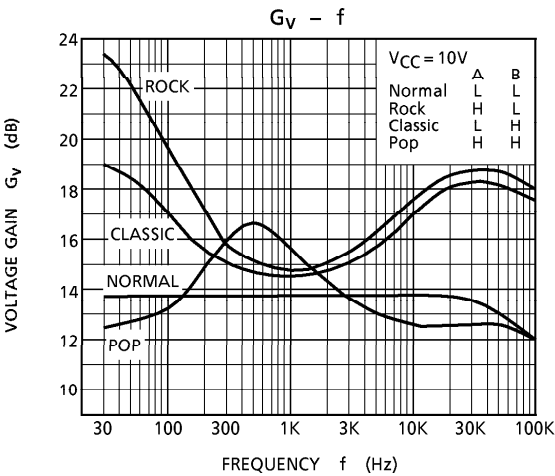
	CONTROL VOLTAGE FOR PIN 10 / 9
"H" Input	$2.0\text{V} \sim V_{CC}$
"L" Input	$0 \sim 0.8\text{V}$ or OPEN

OPERATION MODE

	A (10PIN)	B (9PIN)	BOOST FREQUENCY
NORMAL	L	L	Flat (No equalizing)
ROCK	H	L	High / Low boost-1
CLASSIC	L	H	High / Low boost-2
POP	H	H	Mid boost

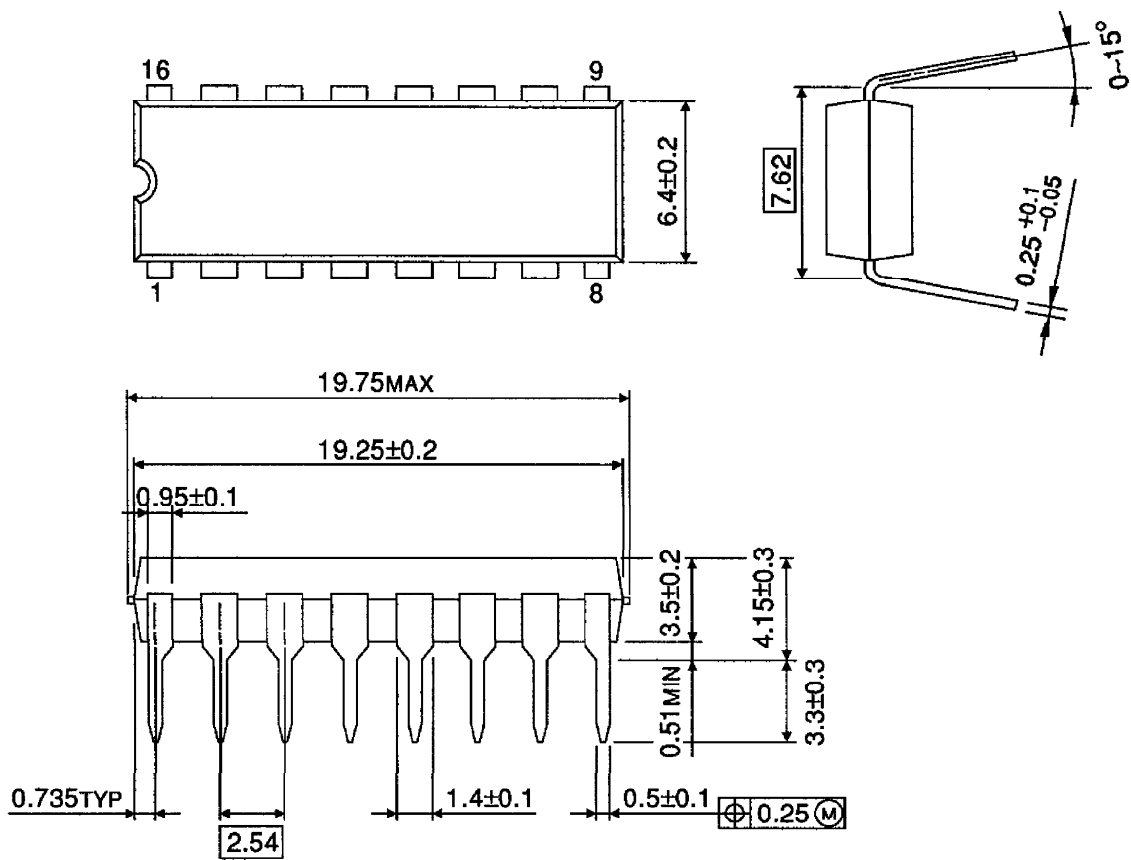
TEST CIRCUIT





OUTLINE DRAWING
DIP16-P-300-2.54A

Unit : mm



Weight : 1.00g (Typ.)