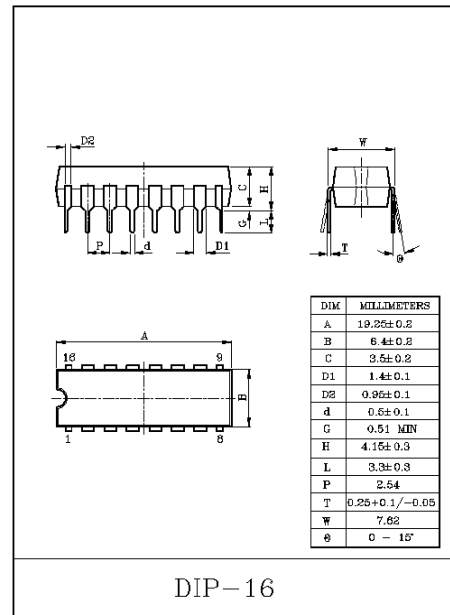


PRESET EQUALIZER IC

KIA2078P 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 controlled 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
- Operation Voltage Range
 - : $V_{CC(opr)} = 7.5 \sim 14.0V$ ($T_a = 25^\circ C$)



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

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

Note : Derated above $T_a = 25^\circ C$ 6mW/°C for KIA2078P

KIA2078P

ELECTRICAL CHARACTERISTICS

(Unless otherwise specified, Ta=25°C, V_{CC}=10V, R_g=620Ω, R_L=10kΩ, f=1kHz, Normal Mode)

CHARACTERISTIC	SYMBOL	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} =200mV _{rms}	-	0.01	0.1	%
Ripple Rejection Ratio	R.R.	V _{rip} =300mV _{rms} , f _{rip} =100Hz	-	-56	-	dB
Cross Talk	C.T.	V _{IN} =350mV _{rms}	-	-70	-60	dB
Output Noise Voltage	V _{no}	R _g =620Ω, DIN AUDIO Filter	-	20	30	μV _{rms}

CONTROL SWITCH VOLTAGE

	Control Voltage for pin 10/9
"H" INPUT	2.0V ~ V _{CC}
"L" INPUT	0 ~ 0.8V or OPEN

OPERATION MODE

	A (Pin 10)	B (Pin 9)	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

KIA2078P

TEST CIRCUIT

