

TA8256BH

AUDIO POWER AMPLIFIER 6W × 3CH

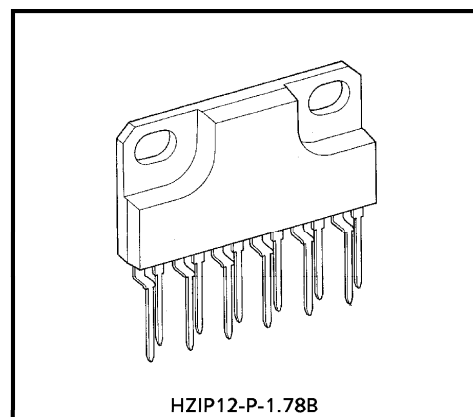
The TA8256BH is 3 channel audio power amplifier for Consumer applications.

This IC provides an output power of 6 watts per channel (at $V_{CC} = 20V$, $f = 1kHz$, $THD = 10\%$, $R_L = 8\Omega$)

It is suitable for power amplifier of TV and home Stereo.

FEATURES

- Built-in 3ch Amplifier
- High Output Power
: $P_{out} = 6W$ (Typ.)
($V_{CC} = 20V$, $R_L = 8\Omega$, $f = 1kHz$, $THD = 10\%$)
- Built-in Audio Muting Circuit.
- NF Terminal Capacitor Less
: Fixed Gain ($G_V = 34dB$), Needless External capacitor.
- Protectors
Thermal shut down Protection circuit, Over Voltage Protection circuit
- Low Popping Noise
- High THD Ratio
- High input dynamic range
- Available for using same PCB layout with 2 channel IC : TA8246H.
- Operating Supply Voltage Range
: $V_{CC(opr)} = 10 \sim 30V$ ($T_a = 25^\circ C$)



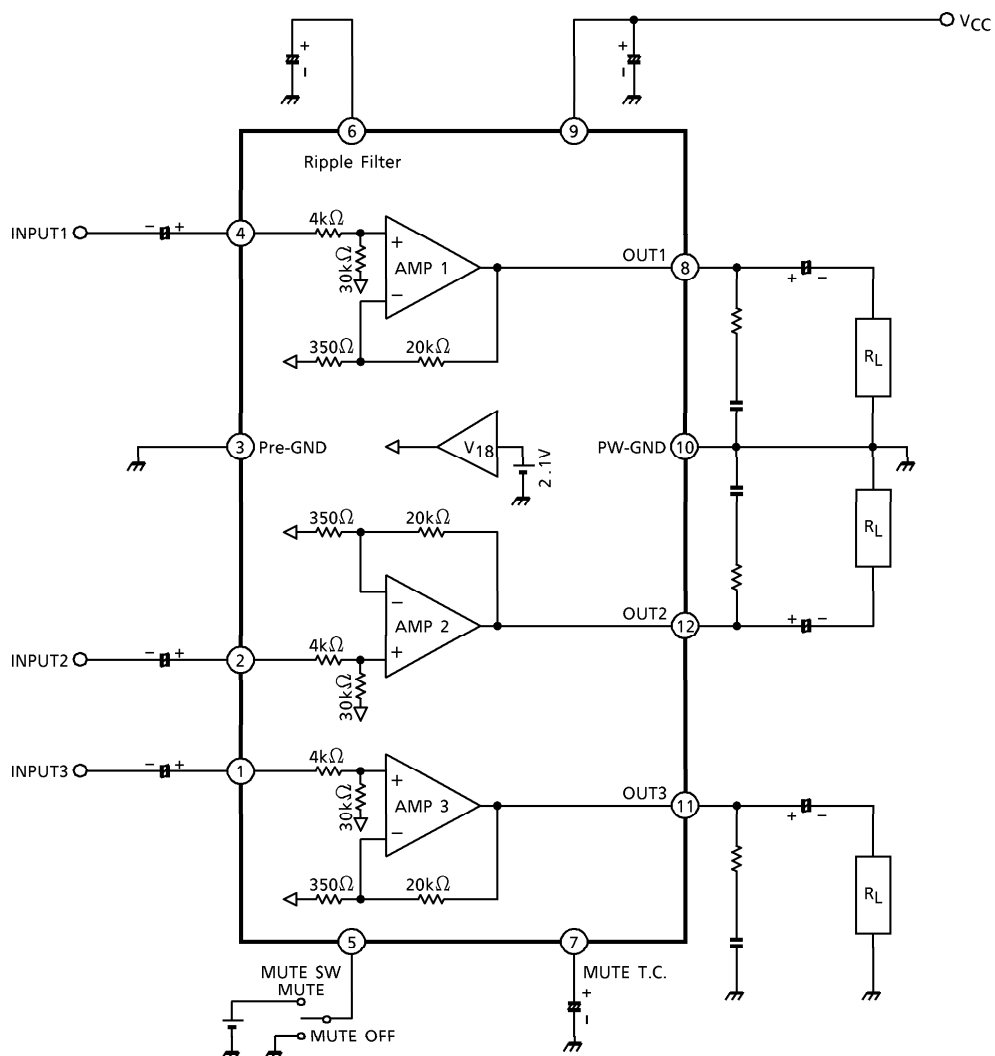
HZIP12-P-1.78B

Weight : 4.04g (Typ.)

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BLOCK DIAGRAM



TERMINAL EXPLANATION

TERMINAL No.	SYMBOL	FUNCTION	EQUIVALENT CIRCUIT
1	IN3	Input	
2	IN2		
4	IN1		
3	Pre-GND	GND terminal	—
5	MUTE. SW	MUTE control terminal	
7	MUTE. T.C		
6	RF	Ripple filter	
8	OUT1	Output	
11	OUT3		
12	OUT2		
9	V _{CC}	Supply voltage terminal	—
10	PW-GND	GND terminal	—

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	30	V
Output Current (Peak / Ch)	$I_{O(\text{peak})}$	2	A
Power Dissipation	P_D (Note)	25	W
Operating Temperature	T_{opr}	$-20 \sim 75$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

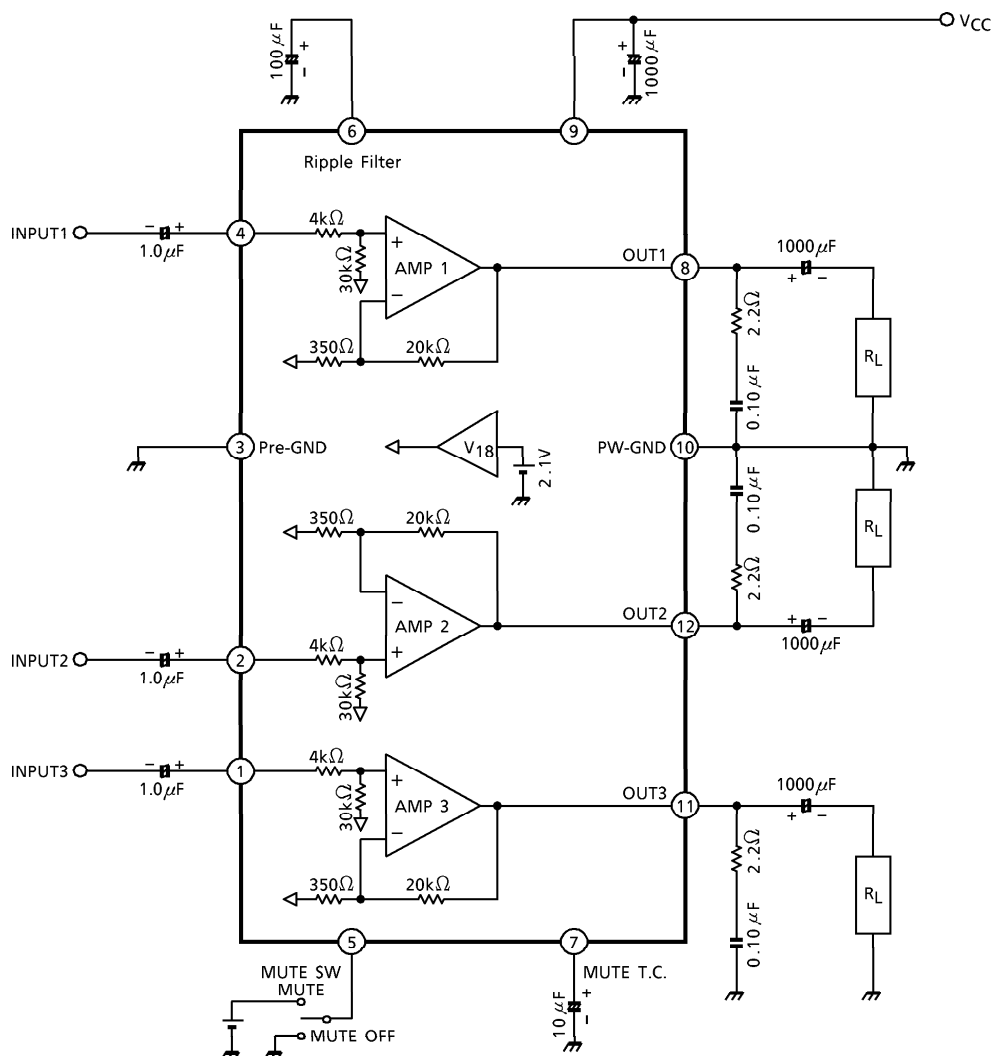
(Note) Derated above $T_a = 25^\circ\text{C}$ in the proportion of $200\text{mW}/^\circ\text{C}$.

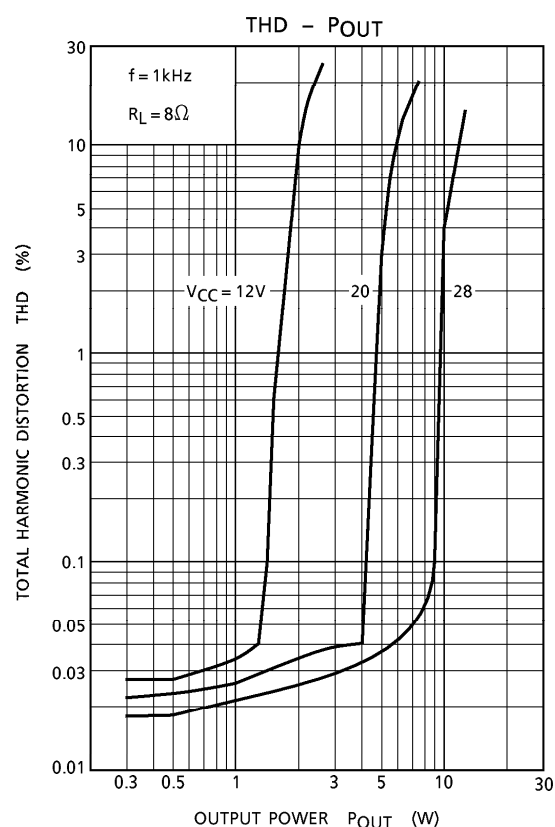
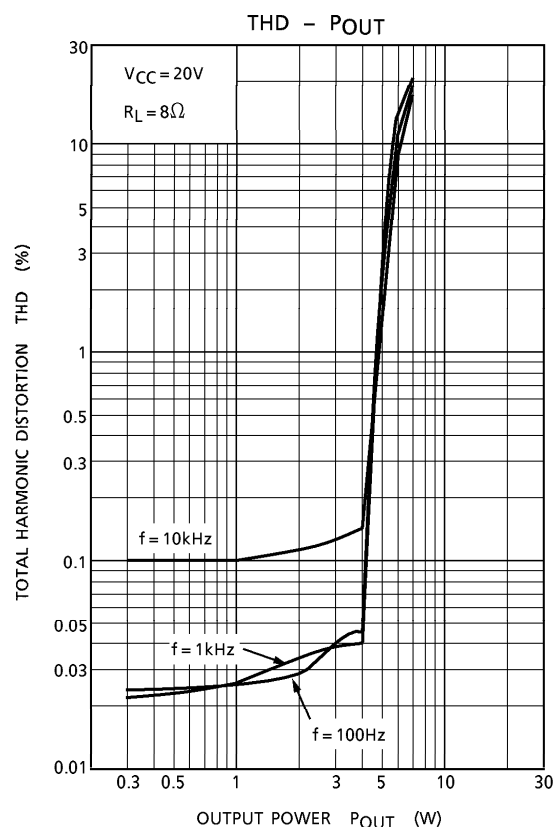
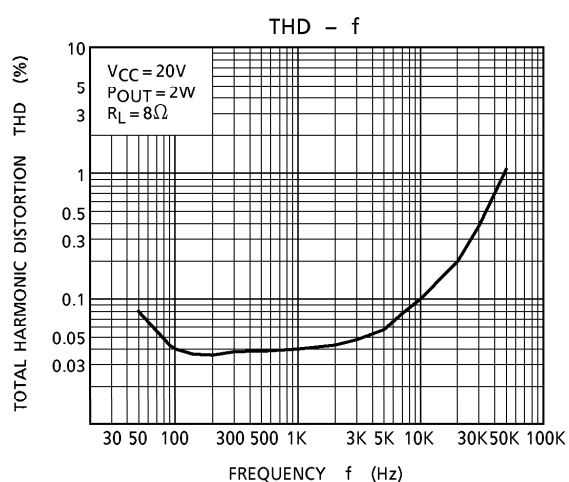
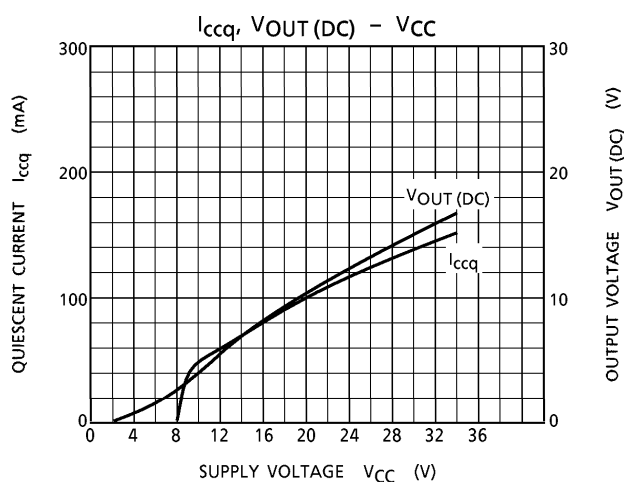
ELECTRICAL CHARACTERISTICS

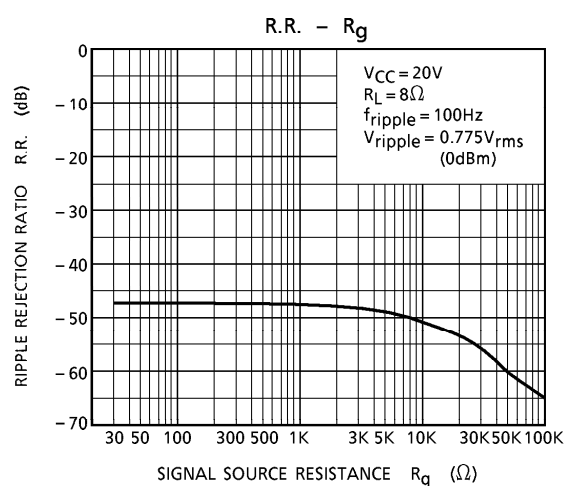
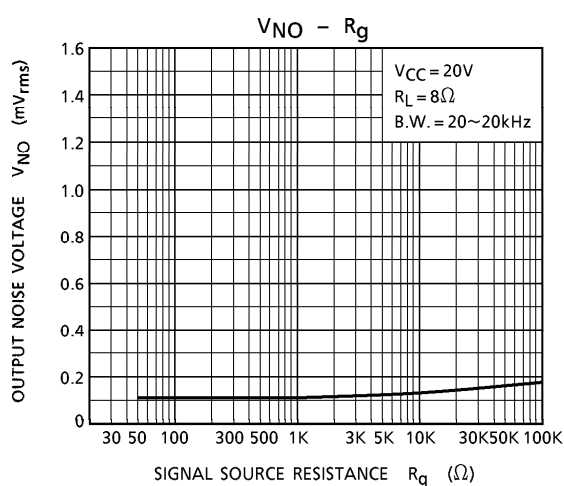
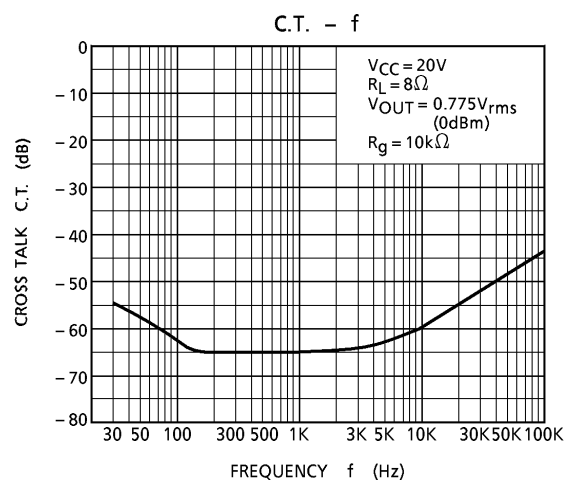
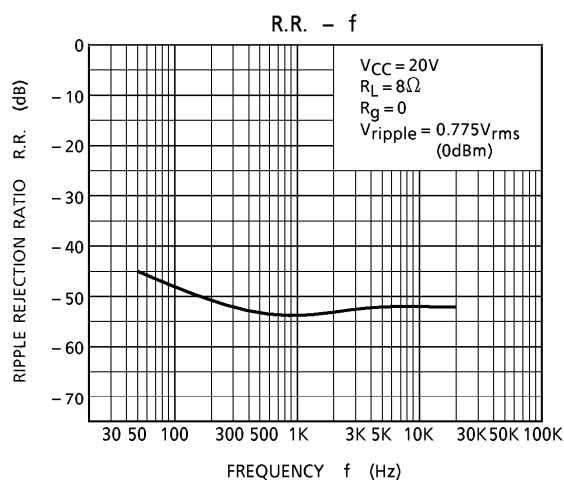
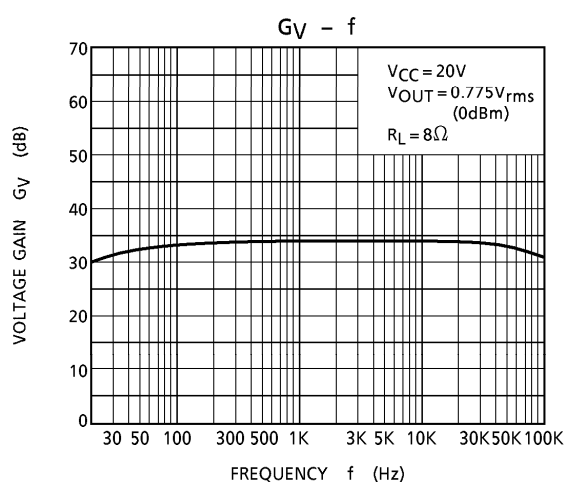
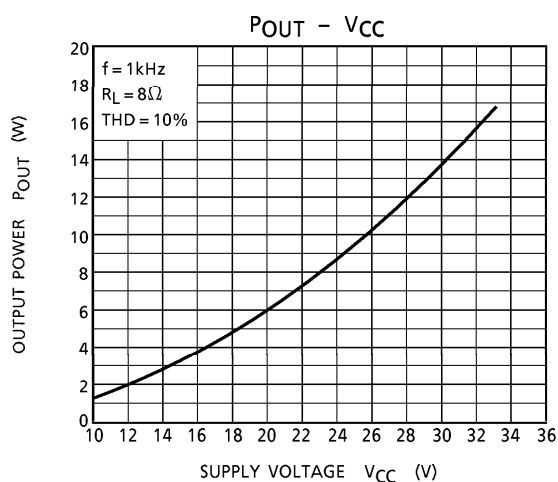
(Unless otherwise specified, $V_{CC} = 20\text{V}$, $R_L = 8\Omega$, $R_g = 620\Omega$, $f = 1\text{kHz}$, $T_a = 25^\circ\text{C}$)

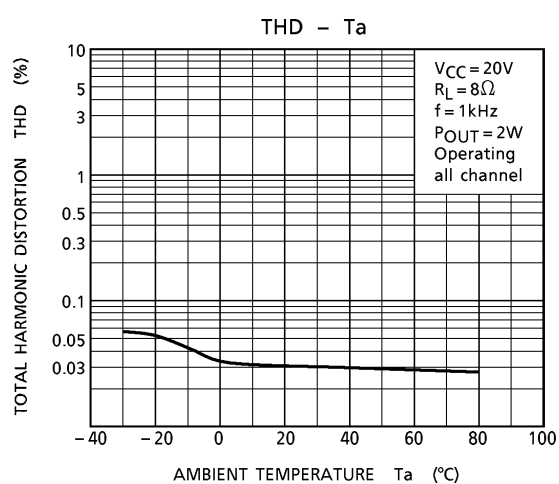
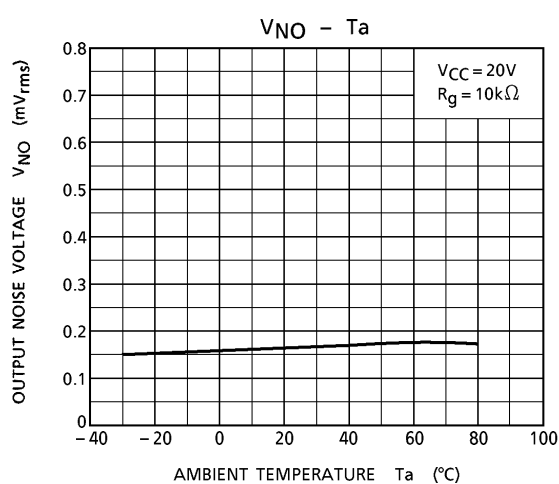
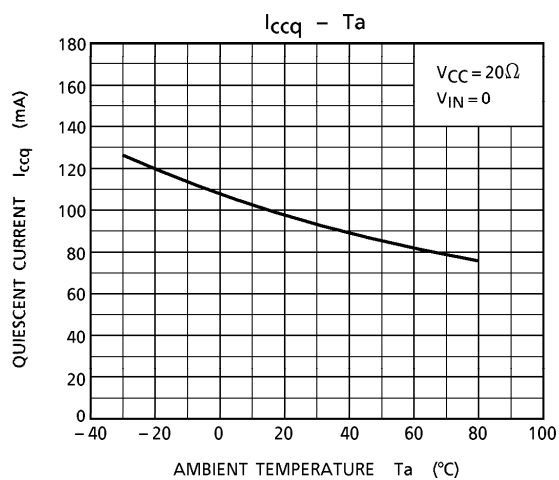
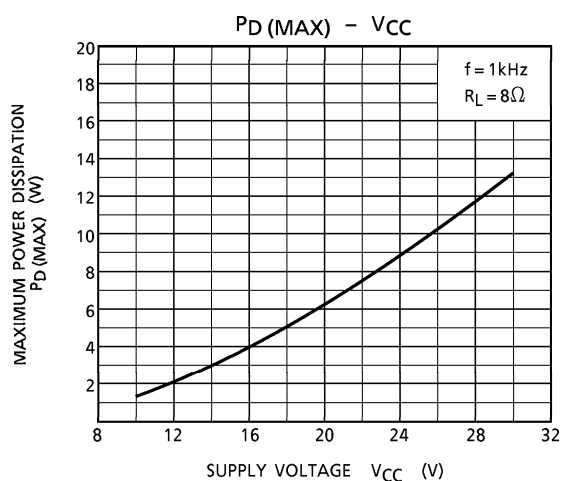
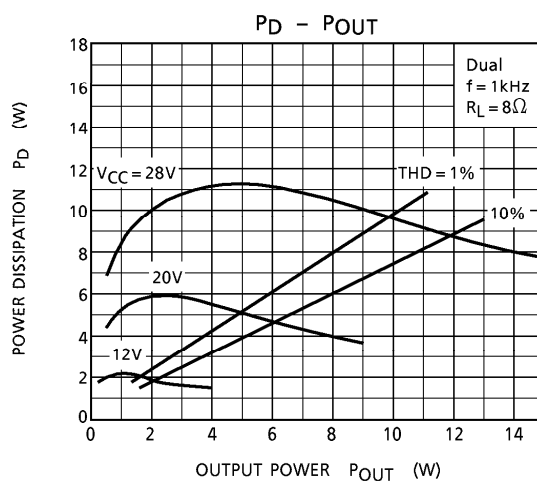
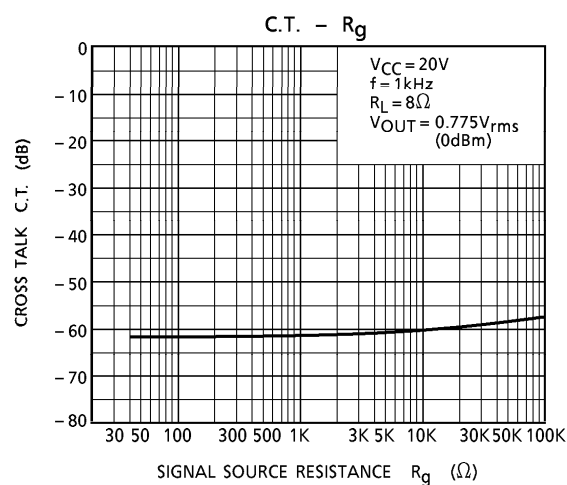
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	I_{ccq}	—	$V_{in} = 0$	65	100	180	mA
Output Power	$P_{out(1)}$	—	THD = 10%	5	6	—	W
	$P_{out(2)}$	—	THD = 1%	—	4.5	—	
Total Harmonic Distortion	THD (1)	—	$P_{out} = 2\text{W}$	—	0.04	0.2	%
	THD (2)	—	$P_{out} = 2\text{W}$, $f = 10\text{kHz}$	—	0.1	0.6	
Voltage Gain	G_V	—	$V_{out} = 0.775V_{rms}$	32.5	34	35.5	dB
Input Resistance	R_{in}	—	—	—	34	—	$k\Omega$
Ripple Rejection Ratio	R.R.	—	$f = 100\text{Hz}$ $V_{ripple} = 0.775V_{rms}$	-40	-47	—	dB
Output Noise Voltage	V_{no}	—	$R_g = 10k\Omega$ $BW = 20\text{Hz} \sim 20\text{kHz}$	—	0.14	0.3	mV_{rms}
Cross Talk	C.T.	—	$V_{out} = 0.775V_{rms}$	—	-60	—	dB
Mute Control Voltage	$V_{th(ON)}$	—	MUTE ON	3.1	—	V_{CC}	V
	$V_{th(OFF)}$	—	MUTE OFF	0	—	2.5	
Mute Attenuation Level	ATT	—	$V_{out} = 0.775V_{rms} \rightarrow \text{MUTE}$	-52	-60	—	dB

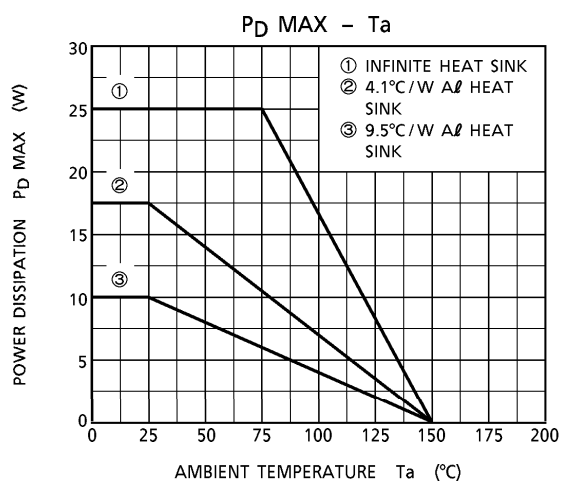
TEST CIRCUIT





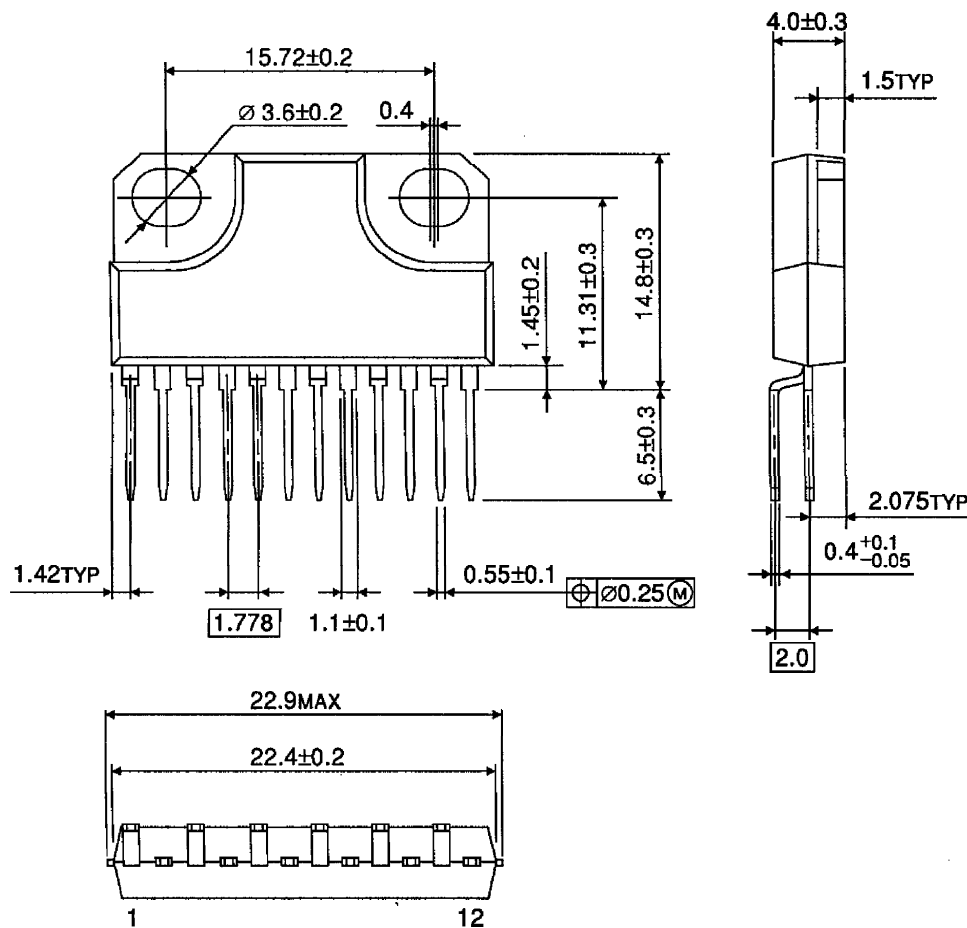






OUTLINE DRAWING
HZIP12-P-1.78B

Unit : mm



Weight : 4.04g (Typ.)