# DATA SHEET

Part No.	AN17020B
Package Code No.	SSOP016-P-0225E

SEMICONDUCTOR COMPANY MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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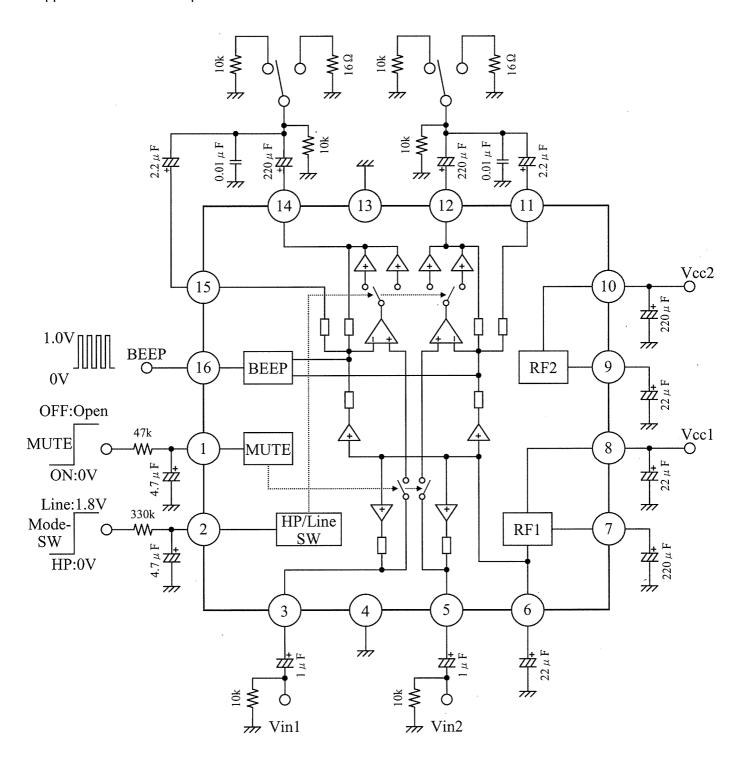
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## AN17020B

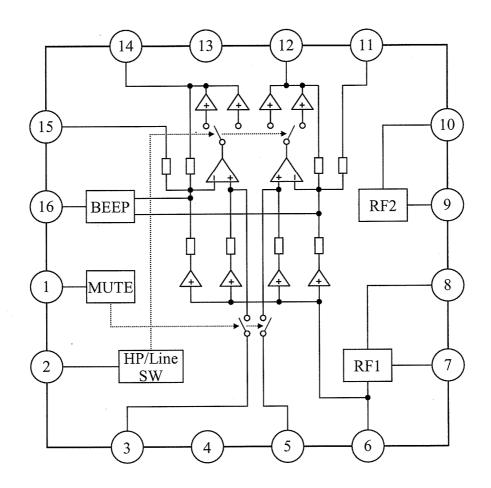
### Headphone amplifier IC

- Features
  - HP/line control function, mute function
- Application
  - Low frequency amplifier
- Package
  - DIL-16 pin plastic package (SO type)

#### ■ Application Circuit Example



#### ■ Block Diagram



#### ■ Pin Descriptions

Pin No.	Description	Pin No.	Description	
1	Muting control	9	Half V <sub>CC2</sub> reference voltage	
2	HP/line control	10	V <sub>CC2</sub>	
3	Ch.1 input	11	Ch.2 sense output	
4	GND (input)	12	Ch.2 power output	
5	Ch.2 input	13	GND (output)	
6	Half V <sub>CC1</sub> reference voltage	14	Ch.1 power output	
7	Ripple filter	15	Ch.1 sense output	
8	V <sub>CC1</sub>	16	Beep output	

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#### ■ Absolute Maximum Ratings

No.	Parameter	Symbol	Rating	Unit	Note
1	Cumply valtage	V <sub>CC1</sub>	4.6	V	_
2	Supply voltage	V <sub>CC2</sub>	4.6	V	_
3	S	$I_{CC1}$	100	mA	_
4	Supply current	$I_{CC2}$	200		_
5	Power dissipation	$P_{\mathrm{D}}$	253	mW	*1
6	Storage temperature	$T_{stg}$	-55 to +150	°C	*2
7	Operating ambient temperature	$T_{opr}$	−25 to +75	°C	*2
8	Operating ambient atmospheric pressure	P <sub>opr</sub>	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	_
9	Operating constant gravity	$G_{ m opr}$	9 810	m/s <sup>2</sup>	_
10	Operating shock	S <sub>opr</sub>	4 900	m/s <sup>2</sup>	_

Note) \*1:  $T_a = 75$ °C. For the independent IC without a heat sink.

#### ■ Operating Supply Voltage Range

Parameter	Symbol	Range	Unit	Note
Operating Supply Voltage Range	V <sub>CC1</sub>	2.0 to 4.5	7.7	_
	V <sub>CC2</sub>	0.9 to 4.5	V	

<sup>\*2:</sup> Except for the storage temperature and operating ambient temperature, all ratings are for  $T_a = 25$ °C.

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