

# DATA SHEET

Part No.	AN7583Z
Package Code No.	HSIP012-P-0000D

SEMICONDUCTOR COMPANY  
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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# AN7583Z

## Audio power amplifier IC

### ■ Features

- Dual 10 W + single 18 W audio power amplifier
- Built-in muting circuit
- Incorporating protection circuit

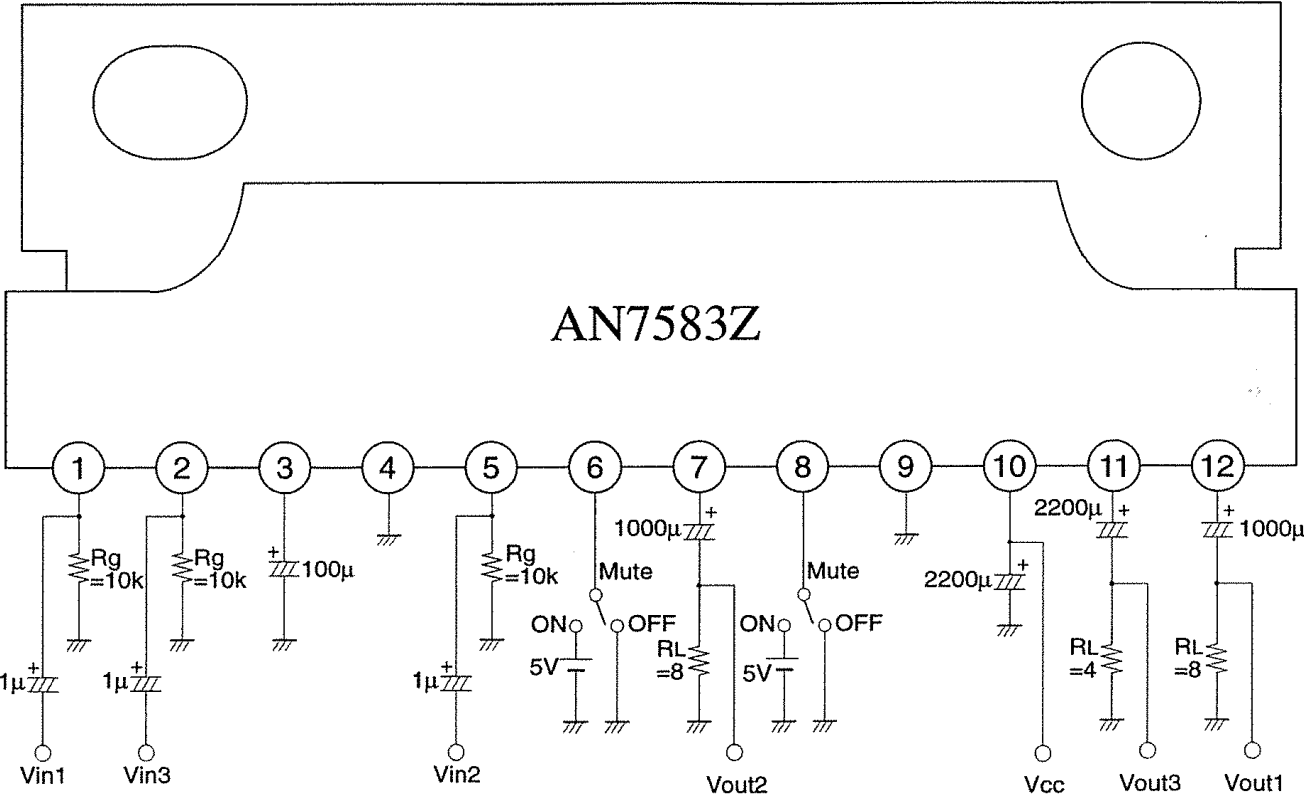
### ■ Application

- Low frequency amplifier

### ■ Package

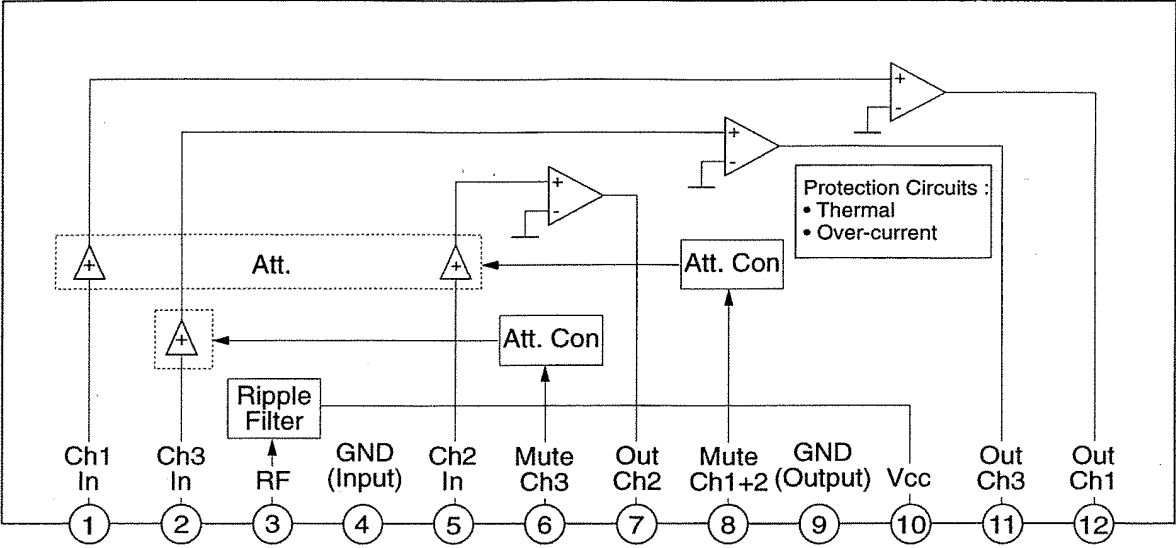
- SIL-12 pin plastic package (Power-type with fin)

■ Application Circuit Example



Note) Mute 'off', connect to 0 V

■ Block Diagram



■ Pin Descriptions

Pin No.	Description	Pin No.	Description
1	Channel 1 input	7	Channel 2 output
2	Channel 3 input	8	Channel 1 & 2 mute
3	Ripple filter	9	Output GND
4	Input GND	10	V <sub>CC</sub>
5	Channel 2 input	11	Channel 3 output
6	Channel 3 mute	12	Channel 1 output

### ■ Absolute Maximum Ratings

No.	Parameter	Symbol	Rating	Unit	Note
1	Supply voltage	$V_{CC}$	35.0	V	—
2	Supply current	$I_{CC}$	8.0	A	—
3	Power dissipation	$P_D$	37.5	W	*1
4	Storage temperature	$T_{stg}$	−55 to +150	°C	*2
5	Operating ambient temperature	$T_{opr}$	−25 to +75	°C	*2
6	Operating ambient atmospheric pressure	$P_{opr}$	$1.013 \times 10^5 \pm 0.61 \times 10^5$ ( $1.0 \pm 0.6$ )	Pa (atm)	—
7	Operating constant gravity	$G_{opr}$	9 810 (1 000)	m/s <sup>2</sup> (G)	—
8	Operating shock	$S_{opr}$	4 900 (500)	m/s <sup>2</sup> (G)	—

Note) \*1:  $T_a = 75^\circ\text{C}$ . For the independent IC without a heat sink.

\*2: Except for the storage temperature and operating ambient temperature, all ratings are for  $T_a = 25^\circ\text{C}$ .

### ■ Operating Supply Voltage Range

Parameter	Symbol	Range	Unit	Note
Operating Supply Voltage Range	$V_{CC}$	10.0 to 32.0	V	—

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