

DATA SHEET

Part No.	AN7580
Package Code No.	HSIP012-P-0000E

SEMICONDUCTOR COMPANY
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

Contents

■ Applications	3
■ Package	3
■ Type	3
■ Application Circuit Example	4
■ Block Diagram	5
■ Pin Descriptions	5
■ Absolute Maximum Ratings	6
■ Operating Supply Voltage Range	6

AN7580

25 W (6 Ω) \times 2-channel BTL power amplifier built-in standby and muting features incorporating various protection circuits

■ Applications

- ICs for audio

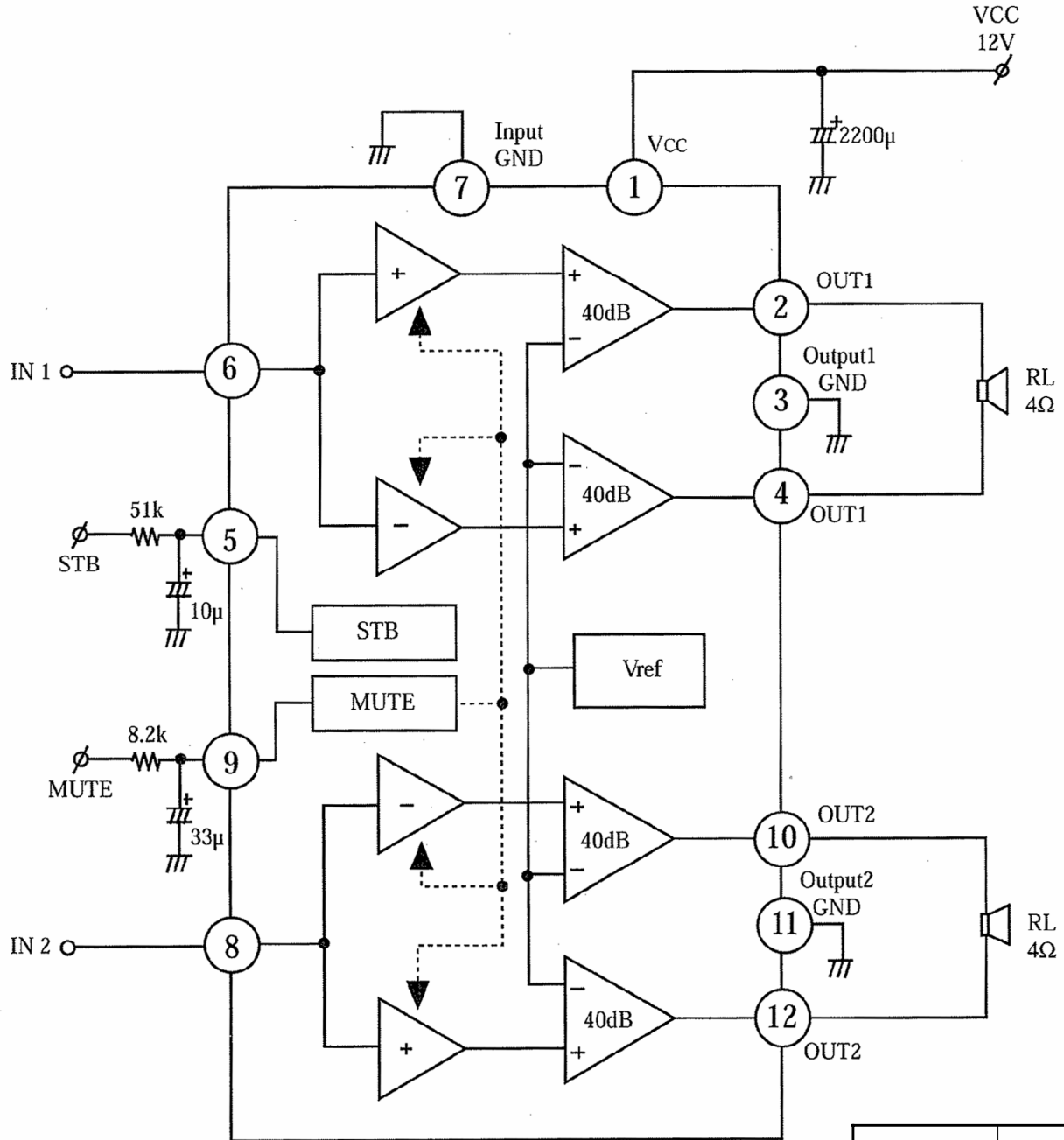
■ Package

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

■ Type

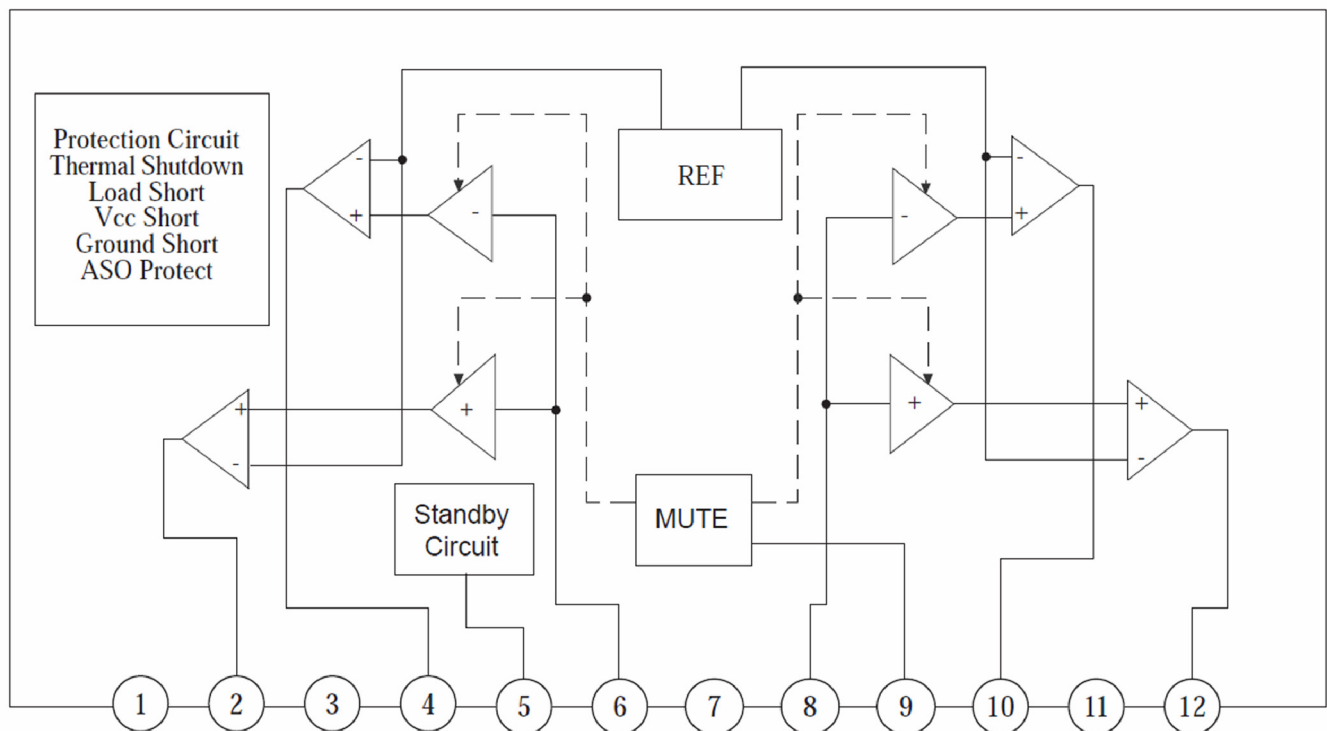
- Silicon monolithic bipolar IC

■ Application Circuit Example



STB "off"	5 V
STB "on"	0 V
Mute "off"	0 V
Mute "on"	3 V

■ Block Diagram



■ Pin Descriptions

Pin No.	Description	Pin No.	Description
1	V _{CC}	7	Pre GND
2	Channel 1 +ve phase output	8	Channel 2 input
3	Channel 1 output GND	9	Mute
4	Channel 1 -ve phase output	10	Channel 2 -ve phase output
5	Standby	11	Channel 2 output GND
6	Channel 1 input	12	Channel 2 +ve phase output

■ Absolute Maximum Ratings

A No.	Parameter	Symbol	Rating	Unit	Note
1	Supply voltage	V_{CC}	24	V	*1
2	Supply current	I_{CC}	8.0	A	
3	Power dissipation	P_D	37.5	W	*2
4	Storage temperature	T_{stg}	-55 to +150	°C	
5	Operating ambient temperature	T_{opr}	-25 to +75	°C	
6	Operating ambient atmospheric pressure	P_{opr}	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	
7	Operating constant gravity	G_{opr}	9 810	m/S ²	
8	Operating shock	S_{opr}	4 900	m/S ²	

Note) *1: Without input signal, V_{CC} is up to 27 V.

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

■ Operating Supply Voltage Range

Parameter	Symbol	Range	Unit	Note
Supply voltage range	V_{CC}	8.0 to 20.0	V	

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