

# DATA SHEET

Part No.	AN17825A
Package Code No.	DIP016-P-0300P

Maintenance/Discontinued includes following lifecycle stage.  
planned maintenance type  
maintenance type  
planned discontinued type  
discontinued type  
Please visit following URL about latest information.  
<http://www.semicon.panasonic.co.jp/en/>

## Contents

■ Overview .....	3
■ Features .....	3
■ Applications .....	3
■ Package .....	3
■ Type .....	3
■ Application Circuit Example .....	4
■ Block Diagram .....	5
■ Pin Descriptions .....	6
■ Absolute Maximum Ratings .....	7
■ Operating Supply Voltage Range .....	7

Maintenance/Discontinued includes following four Product lifecycle stage.  
Discontinued  
planned maintenance type  
maintenance type  
planned discontinued type  
discontinued type  
Please visit following URL about latest information.  
<http://www.semicon.panasonic.co.jp/en/>

# AN17825A

## A dual channel OTL audio power amplifier IC

### ■ Overview

AN17825A is a monolithic integrated circuit designed for  $1.7W \times 2$  ( $8\Omega$ ). It is a dual channel OTL IC suitable for operation in TV application.

### ■ Features

- Few external components-no Boucherot cells (output C, R) and no negative feedback capacitors
- Built-in thermal protection circuit
- Built-in Mute circuit
- Built-in standby circuit

### ■ Applications

- IC for audio applications

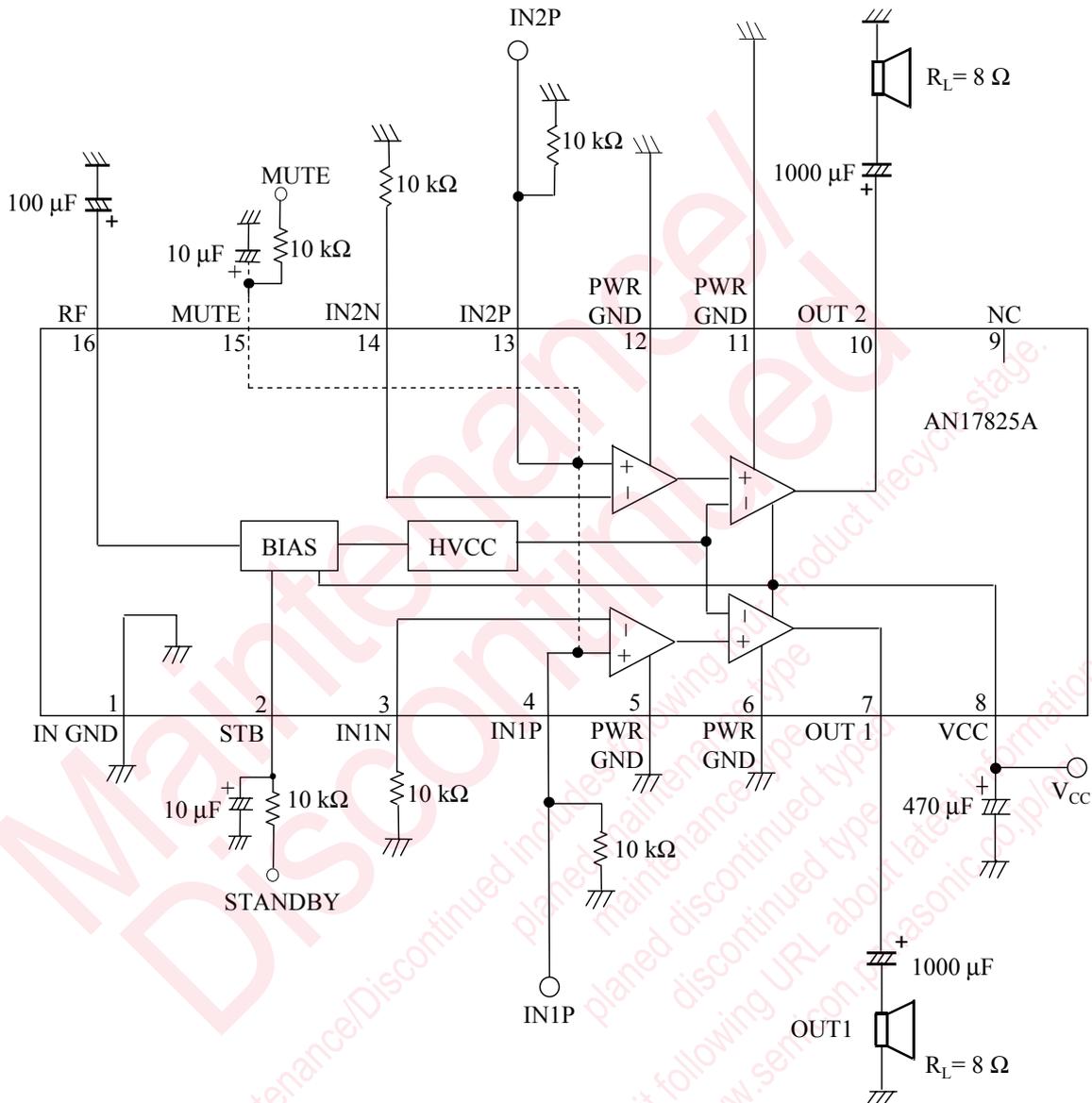
### ■ Package

- 16-pin plastic dual inline package (DIP type)

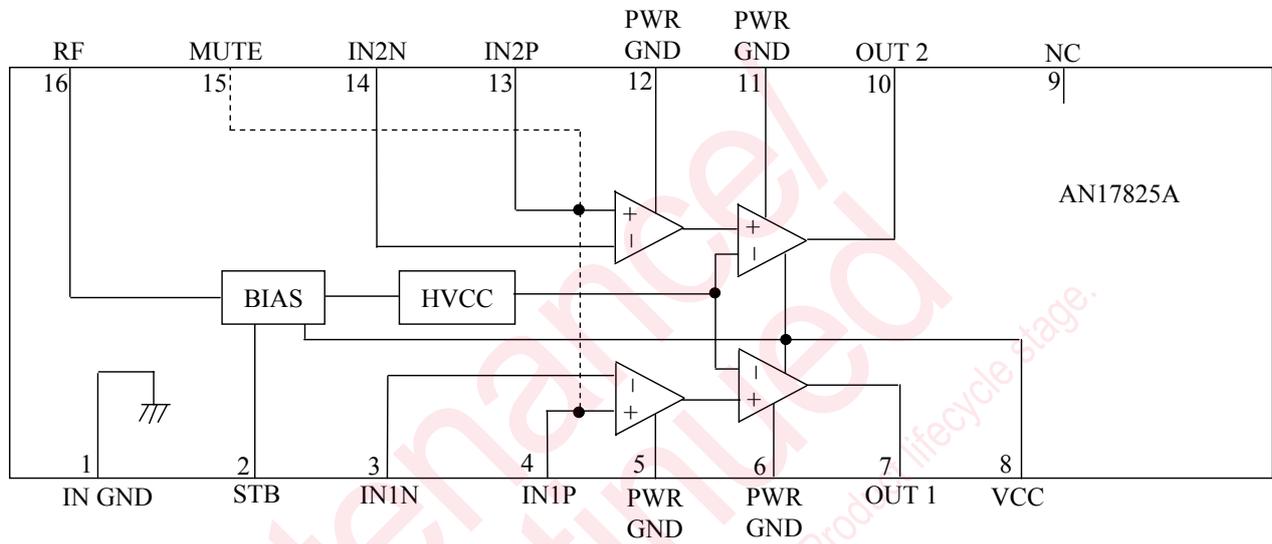
### ■ Type

- Silicon monolithic bipolar IC

■ Application Circuit Example



■ Block Diagram



Maintenance/Discontinued includes following four Product lifecycle stage.  
 Discontinued  
 planned maintenance type  
 maintenance type  
 planned discontinued type  
 discontinued type  
 Please visit following URL about latest information.  
<http://www.semicon.panasonic.co.jp/en/>

## ■ Pin Descriptions

Pin No.	Pin name	Type	Description
1	IN GND	Ground	Ground
2	STB	Control voltage	Standby
3	IN1N	Input	Negative input
4	IN1P	Input	Positive input
5	PWR GND	Ground	Ground
6	PWR GND	Ground	Ground
7	OUT 1	Output	Channel 1 output
8	VCC	Power supply	11 V power supply
9	NC	Not connected	Not connected
10	OUT 2	Output	Channel2 output
11	PWR GND	Ground	Ground
12	PWR GND	Ground	Ground
13	IN2P	Input	Positive input
14	IN2N	Input	Negative input
15	MUTE	Control voltage	Mute
16	RF	Reference voltage	Ripple filter

### ■ Absolute Maximum Ratings

A No.	Parameter	Symbol	Rating	Unit	Note
1	Supply voltage	$V_{CC}$	14.9	V	*1
2	Supply current	$I_{CC}$	1	A	
3	Power dissipation	$P_D$	0.728	W	*2
4	Operating ambient temperature	$T_{opr}$	-20 to +75	°C	*3
5	Storage temperature	$T_{stg}$	-55 to +150	°C	*3

Note) \*1: The values under the condition not exceeding the above absolute maximum ratings and the power dissipation.

\*2: The power dissipation shown is the value at  $T_a = 75^\circ\text{C}$  for the independent IC package without a heat sink.

\*3: Except for the operating ambient temperature and storage temperature, all ratings are for  $T_a = 25^\circ\text{C}$ .

### ■ Operating supply voltage range

Parameter	Symbol	Range	Unit	Note
Supply voltage range	$+V_{CC}$	6.5 to 14.5	V	

## Request for your special attention and precautions in using the technical information and semiconductors described in this book

- (1) If any of the products or technical information described in this book is to be exported or provided to non-residents, the laws and regulations of the exporting country, especially, those with regard to security export control, must be observed.
- (2) The technical information described in this book is intended only to show the main characteristics and application circuit examples of the products, and no license is granted under any intellectual property right or other right owned by our company or any other company. Therefore, no responsibility is assumed by our company as to the infringement upon any such right owned by any other company which may arise as a result of the use of technical information described in this book.
- (3) The products described in this book are intended to be used for standard applications or general electronic equipment (such as office equipment, communications equipment, measuring instruments and household appliances).  
Consult our sales staff in advance for information on the following applications:
  - Special applications (such as for airplanes, aerospace, automobiles, traffic control equipment, combustion equipment, life support systems and safety devices) in which exceptional quality and reliability are required, or if the failure or malfunction of the products may directly jeopardize life or harm the human body.
  - Any applications other than the standard applications intended.
- (4) The products and product specifications described in this book are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements.
- (5) When designing your equipment, comply with the range of absolute maximum rating and the guaranteed operating conditions (operating power supply voltage and operating environment etc.). Especially, please be careful not to exceed the range of absolute maximum rating on the transient state, such as power-on, power-off and mode-switching. Otherwise, we will not be liable for any defect which may arise later in your equipment.
  - Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.
- (6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.
- (7) This book may be not reprinted or reproduced whether wholly or partially, without the prior written permission of Matsushita Electric Industrial Co., Ltd.