

Audio Amp Speaker 4-CH Stereo 30W Class-AB Automotive 25-Pin FLEXIWATT(Vertical) Tube

Manufacturer: <u>STMicroelectronics, Inc</u>

Package/Case: ZIP25

Product Type: Amplifier ICs

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The TDA7381 is a class AB audio power amplifier in Flexiwatt25 package designed for car radio applications. Thanks to the fully complementary PNP/NPN output configuration the TDA7381 allows a rail to rail output voltage swing with no need of bootstrap capacitors. The extremely reduced components count allows very compact sets. The on-board clipping detector simplifies gain compression operations. The fault diagnostics makes it possible to detect mistakes during car-radio assembly and wiring in the car.

Key Features

High output power capability:

4 x 30 W/4 Ω max.

4 x 25 W/4 Ω EIAJ

4 x 18 W/4 Ω @ 14.4 V, 1 kHz, 10 %

4 x 15 W/4 Ω @ 13.2 V, 1 kHz, 10 %

4 x 30 W/4 Ω max.

4 x 25 W/4 Ω EIAJ

 $4 \times 18 \text{ W/4 }\Omega$ @ 14.4 V, 1 kHz, 10 %

4 x 15 W/4 Ω @ 13.2 V, 1 kHz, 10 %

Clipping detector

Low distortion

Low output noise

Standby function

Mute function

Automute at min. supply voltage detection

Diagnostics facility for:

Clippins

Out to GND short
Out to VSshort
Thermal shutdown
Clipping
Out to GND short
Out to VSshort
Thermal shutdown
Low external component count:
Internally fixed gain (26 dB)
No external compensation
No bootstrap capacitors
Internally fixed gain (26 dB)
No external compensation
No bootstrap capacitors
Protections:
Output short circuit to GND, to VS, across the load
Very inductive loads
Overrating chip temperature with soft thermal limiter
Load dump voltage
Fortuitous open GND
Reversed battery
ESD protection
Output short circuit to GND, to VS, across the load
Very inductive loads
Overrating chip temperature with soft thermal limiter
Load dump voltage
Fortuitous open GND
Reversed battery
ESD protection





Recommended For You

TDA7387EP

STMicroelectronics, Inc

ZIP25

TDA7419

STMicroelectronics, Inc

SOP28

TDA7376B

STMicroelectronics, Inc

ZIP-15

TDA2005R

STMicroelectronics, Inc

ZIP

TDA7850A

STMicroelectronics, Inc

ZIP27

TDA7562

STMicroelectronics, Inc

ZIP27

TDA7561

STMicroelectronics, Inc

ZIP

TDA7851L

STMicroelectronics, Inc

ZIP-25

TDA7801

STMicroelectronics, Inc

ZIP27

TDA7563ASM

STMicroelectronics, Inc

ZIP-27

TDA7296

STMicroelectronics, Inc

ZIP-15

TDA7575B

STMicroelectronics, Inc

ZIP27

TDA7417

STMicroelectronics, Inc

QFP

TDA7388A

STMicroelectronics, Inc

ZIP-27

TDA75610LV

STMicroelectronics, Inc

ZIP27