



## 5W+5W AMPLIFIER WITH DC VOLUME CONTROL

PRODUCT PREVIEW

- 5+5W OUTPUT POWER  
 $R_L = 8\Omega @THD = 10\% V_{CC} = 22V$
- ST-BY AND MUTE FUNCTIONS
- LOW TURN-ON TURN-OFF POP NOISE
- LINEAR VOLUME CONTROL DC COUPLED WITH POWER OP. AMP.
- NO BOUCHEROT CELL
- NO ST\_BY RC INPUT NETWORK
- SINGLE SUPPLY RANGING UP TO 35V
- SHORT CIRCUIT PROTECTION
- THERMAL OVERLOAD PROTECTION
- INTERNALLY FIXED GAIN
- SOFT CLIPPING
- VARIABLE OUTPUT AFTER VOLUME CONTROL CIRCUIT
- CLIPWATT 15 PACKAGE

### MULTIPOWER BI50II TECHNOLOGY



Clipwatt 15

ORDERING NUMBER: TDA7496SA

amplifier assembled in the @Clipwatt 15 package, specially designed for high quality sound TV applications.

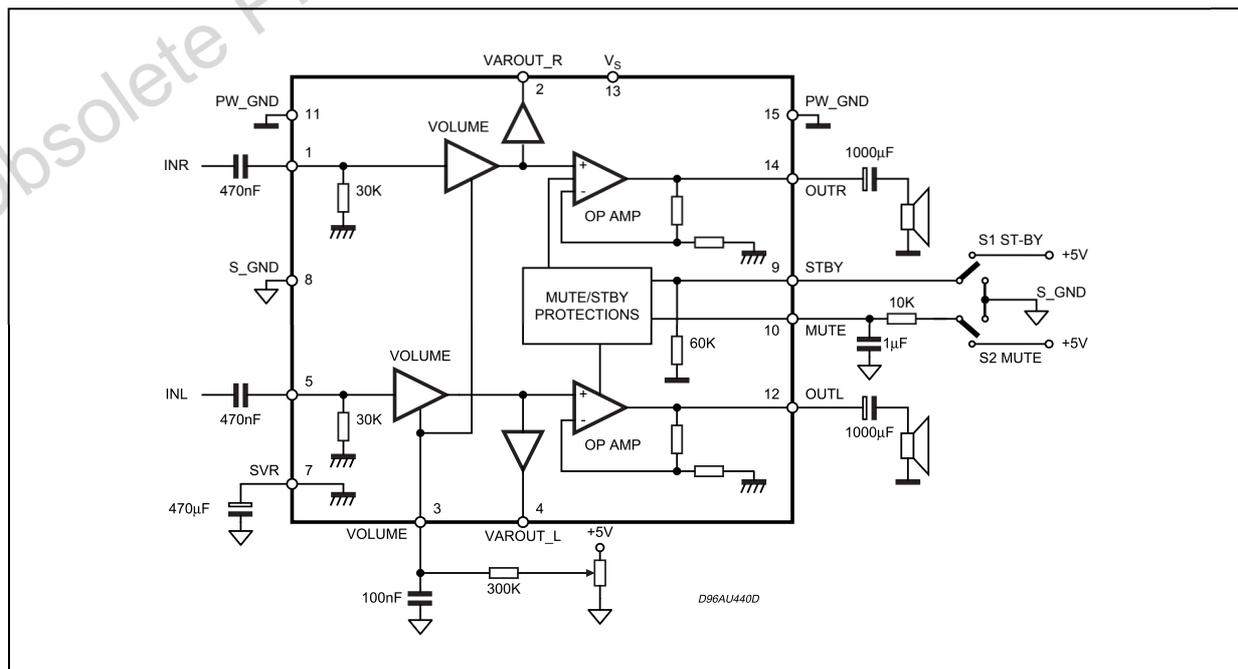
Features of the TDA7496SA include linear volume control Stand-by and Mute functions.

The TDA7496SA is pin to pin compatible with TDA7496, TDA7496S, TDA7496SA, TDA7495, TDA7495SA, TDA7494S, TDA7494SA.

### DESCRIPTION

The TDA7496SA is a stereo 5+5W class AB power

### BLOCK DIAGRAM

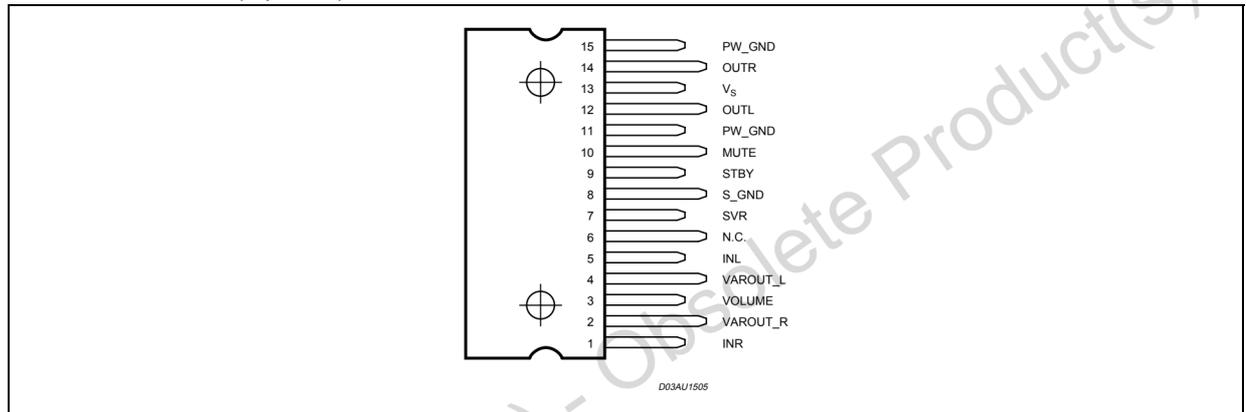


# TDA7496SA

## ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V <sub>S</sub>	DC Supply Voltage	35	V
V <sub>IN</sub>	Maximum Input Voltage	8	V <sub>pp</sub>
P <sub>tot</sub>	Total Power Dissipation (T <sub>amb</sub> = 70°C)	16	W
T <sub>amb</sub>	Ambient Operating Temperature (1)	0 to 70	°C
T <sub>stg</sub> , T <sub>J</sub>	Storage and Junction Temperature	-40 to 150	°C
V <sub>3</sub>	Volume Control DC Voltage	7	V

## PIN CONNECTION (top view)



## THERMAL DATA

Symbol	Parameter	Value	Unit
R <sub>th j-case</sub>	Thermal Resistance junction-case	Typ. = 4.5; Max. = 5	°C/W
R <sub>th j-amb</sub>	Thermal Resistance junction-ambient Max.	48	°C/W

## ELECTRICAL CHARACTERISTICS

(Refer to the test circuit R<sub>L</sub> = 8Ω, f = 1KHz, R<sub>G</sub> = 50Ω, V<sub>S</sub> = 22V, T<sub>amb</sub> = 25°C)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V <sub>S</sub>	Supply Voltage Range		10		32	V
I <sub>q</sub>	Total Quiescent Current			25	50	mA
DCV <sub>os</sub>	Output DC Offset Referred to SVR Potential	No Input Signal		200		mV
V <sub>O</sub>	Quiescent Output Voltage			11		V
P <sub>O</sub>	Output Power	THD = 10%; R <sub>L</sub> = 8Ω; THD = 1%; R <sub>L</sub> = 8Ω;	5	5.5 4		W
		THD = 10%; R <sub>L</sub> = 4Ω; V <sub>S</sub> = 12V THD = 1%; R <sub>L</sub> = 4Ω; V <sub>S</sub> = 12V		2.1 1.0		W
THD	Total Harmonic Distortion	G <sub>V</sub> = 30dB; P <sub>O</sub> = 1W; f = 1KHz			0.4	%