



# TDA7267

## 2W MONO AMPLIFIER

- CAN DELIVER 2W THD 10% 12V/8Ω
- INTERNAL FIXED GAIN 32dB
- NO FEEDBACK CAPACITOR
- NO BOUCHEROT CELL
- THERMAL PROTECTION
- AC SHORT CIRCUIT PROTECTION
- SVR CAPACITOR FOR BETTER RIPPLE REJECTION
- LOW TURN-ON/OFF POP
- STAND-BY MODE



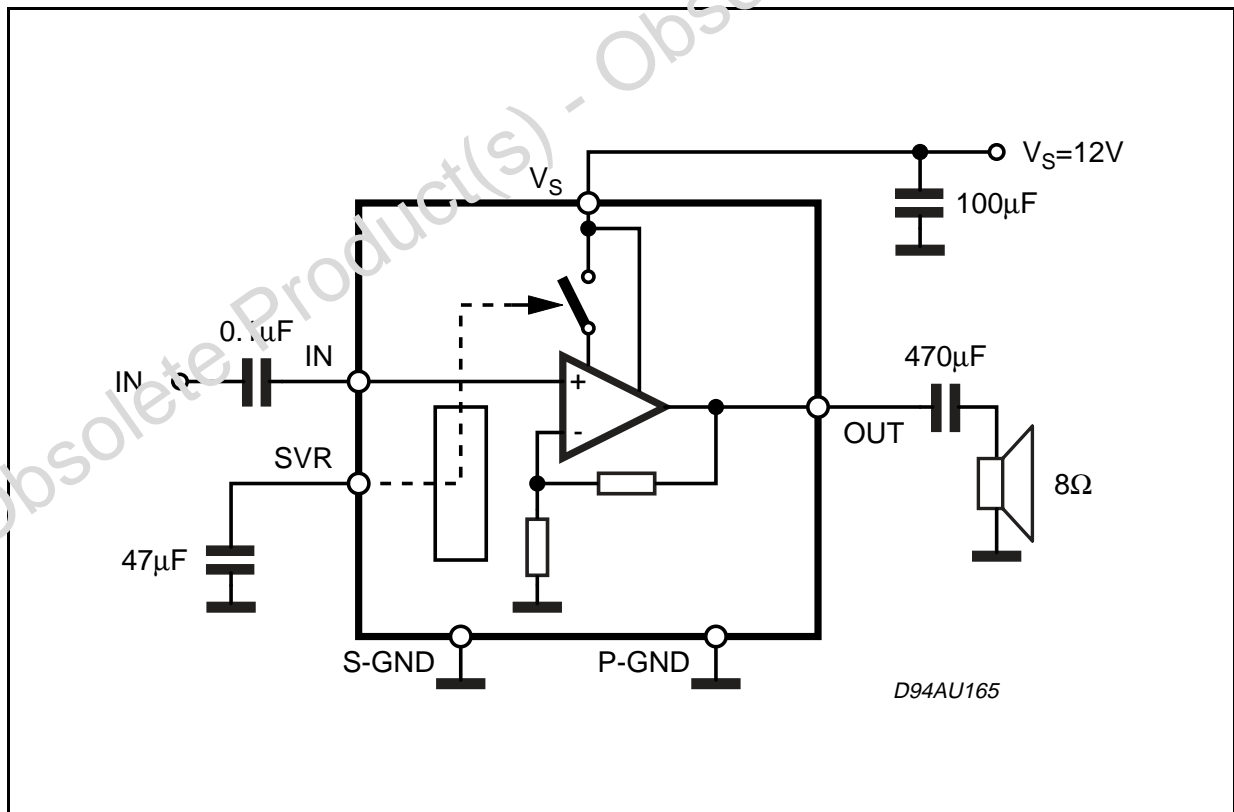
### DESCRIPTION

The device TDA7267 is a new technology Mono Audio Amplifier in MINIDIP package specifically designed for TV application.

Thanks to the fully complementary output configura-

tion the device delivers a rail to rail voltage swing without need of bootstrap capacitors.

### BLOCK DIAGRAM

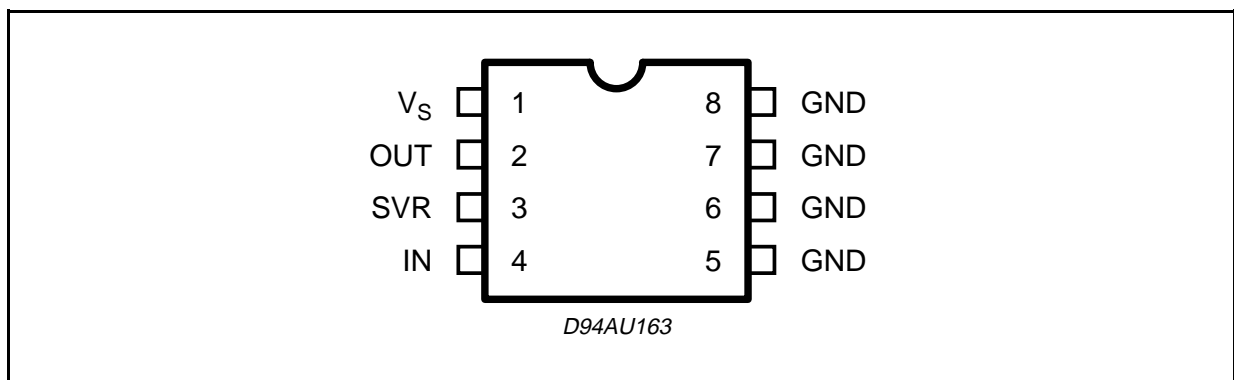


## TDA7267

### ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
$V_S$	Operating Supply Voltage	18	V
$I_O$	Output Put Peak Current	1.5	A
$T_{op}$	Operating Temperature Range	0 to 70	°C
$T_j$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature Range	-40 to 125	°C

### PIN CONNECTION (Top view)



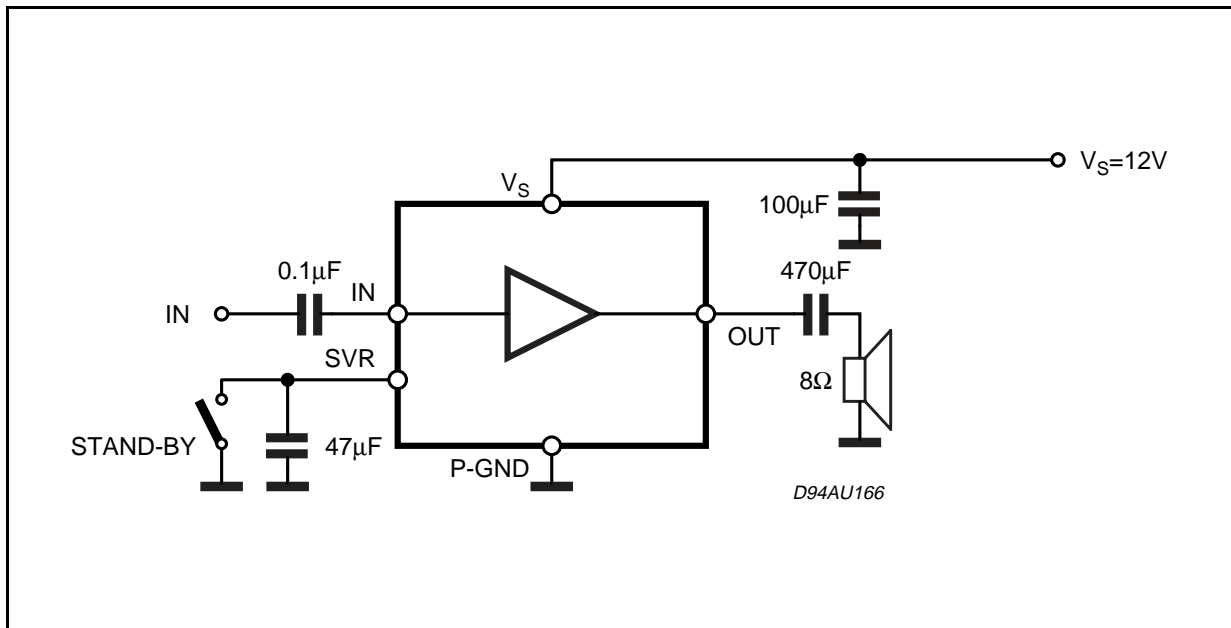
### THERMAL DATA

Symbol	Parameter	Value	Unit
$R_{th\ j-amb}$	Thermal Resistance Junction to ambient (on PCB)	80	°C/W
$R_{th\ j-case}$	Thermal Resistance Junction to case	15	°C/W

### ELECTRICAL CHARACTERISTICS ( $T_{amb} = 25^{\circ}\text{C}$ ; $V_S = 12\text{V}$ ; $R_L = 8\Omega$ ; $f = 1\text{KHz}$ ; unless otherwise specified.)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
$V_S$	Supply Voltage Range		4.5		18	V
$I_S$	Quiescent Current			20	30	mA
$I_{sb}$	Stand-By Current	Pin 3 shorted to GND			0.3	mA
$V_O$	Quiescent Output Voltage			6		V
$A_V$	Voltage Gain			32		dB
$R_{IN}$	Input Impedance			100		K $\Omega$
$P_O$	Output Power	THD = 10%	1.8	2		W
THD	Distortion	$P_O = 1\text{W}$			1.0	%
SVR	Supply Voltage Rejection	$V_{ripple} = 150\text{mVrms}$ ; $F_{ripple} = 1\text{KHz}$		50		dB
$E_I$	Input Noise Voltage	$R_g = 10\text{K}\Omega$ ; BW = 20Hz to 20KHz		1.5	5	$\mu\text{V}$
$V_{sb}$	Stand-By Enable Voltage				1	V

## APPLICATION CIRCUIT

**APPLICATION HINTS:**

For 12V supply and 8Ω speaker application, its maximum power dissipation is about 1W.

Assuming that max ambient temperature is 70°C. Required thermal resistance of the device and heat dissipating means must be equal to  $(150 - 70)/1 = 80^{\circ}\text{C}/\text{W}$ .

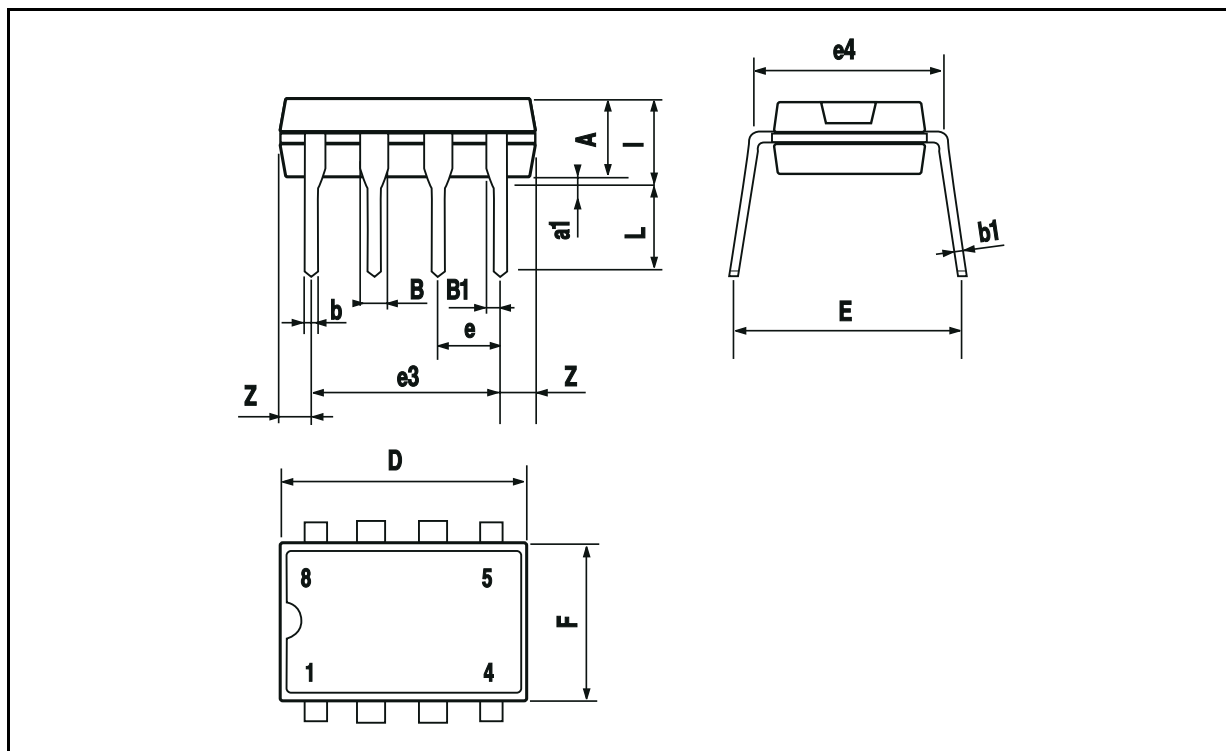
Junction to pin thermal resistance of the package is about 15°C/W. That means external heat sink of about 65°C/W is required.

Cu ground plane of PCB can be used as heat dissipating means.

Stand-By switches must be able to discharge  $C_{SVR}$  current.

MINIDIP PACKAGE MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A		3.3			0.130	
a1	0.7			0.028		
B	1.39		1.65	0.055		0.065
B1	0.91		1.04	0.036		0.041
b		0.5			0.020	
b1	0.38		0.5	0.015		0.020
D			9.8			0.386
E		8.8			0.346	
e		2.54			0.100	
e3		7.62			0.300	
e4		7.62			0.300	
F			7.1			0.280
I			4.8			0.189
L		3.3			0.130	
Z	0.44		1.6	0.017		0.063



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