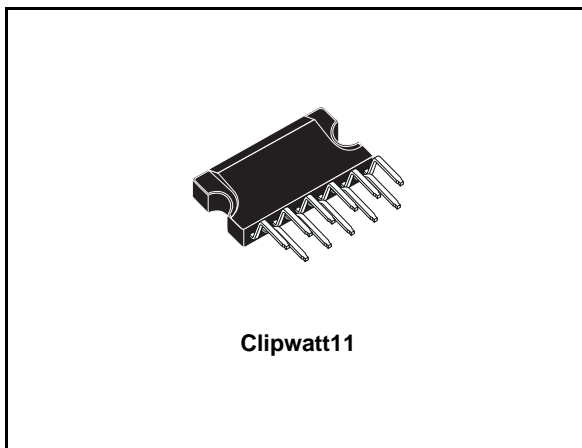


**8W AMPLIFIER WITH MUTING**

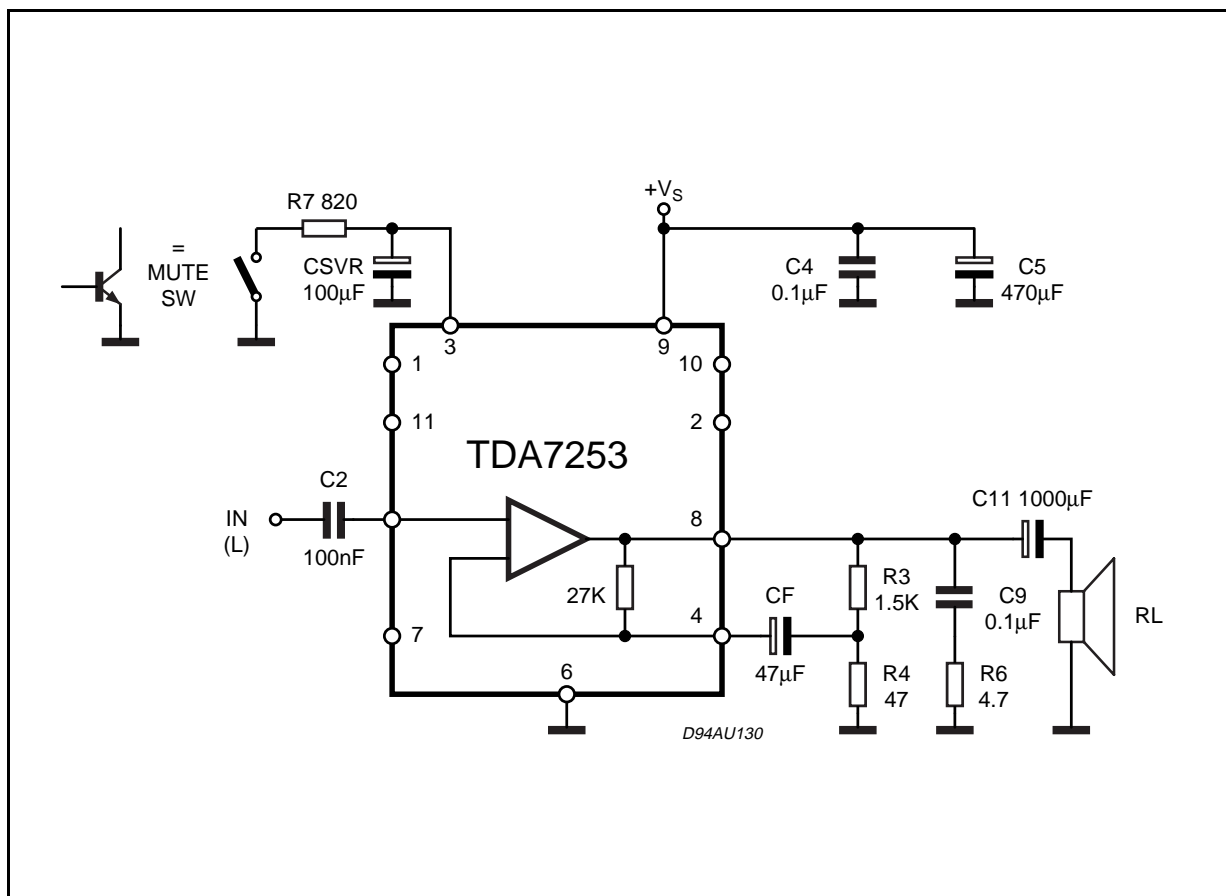
- WIDE SUPPLY VOLTAGE RANGE
- 8W @  $V_S=26V$ ,  $R_L = 8\Omega$ , THD=10%
- MUTE FACILITY (POP FREE) WITH LOW CONSUMPTION
- AC SHORT CIRCUIT PROTECTION
- THERMAL OVERLOAD PROTECTION (150°C)

**DESCRIPTION**

The TDA7253 is class AB audio power amplifier assembled in the new Clipwatt package.



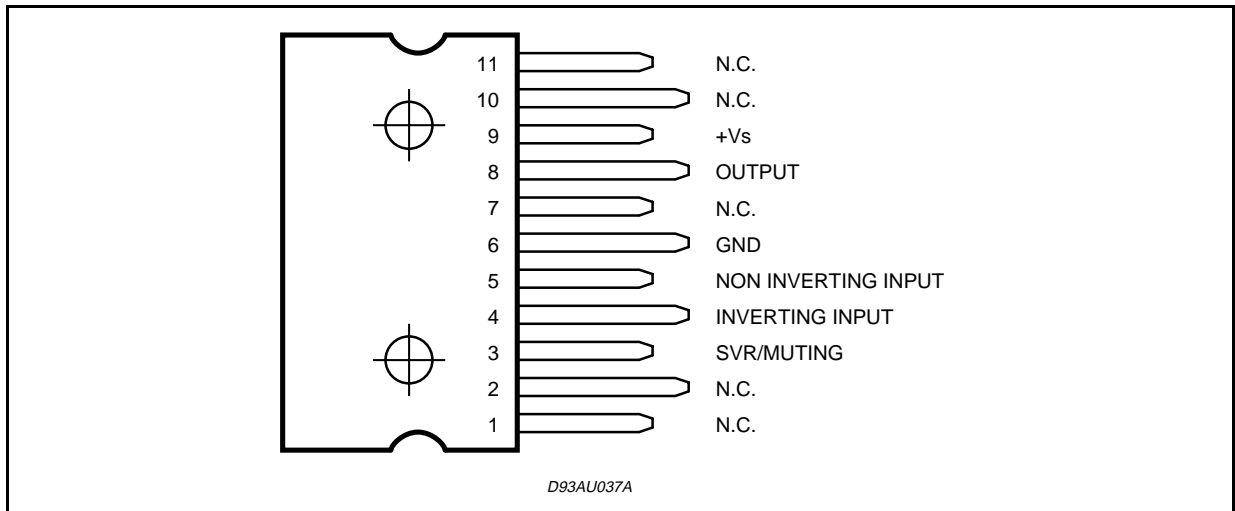
**APPLICATION CIRCUIT**



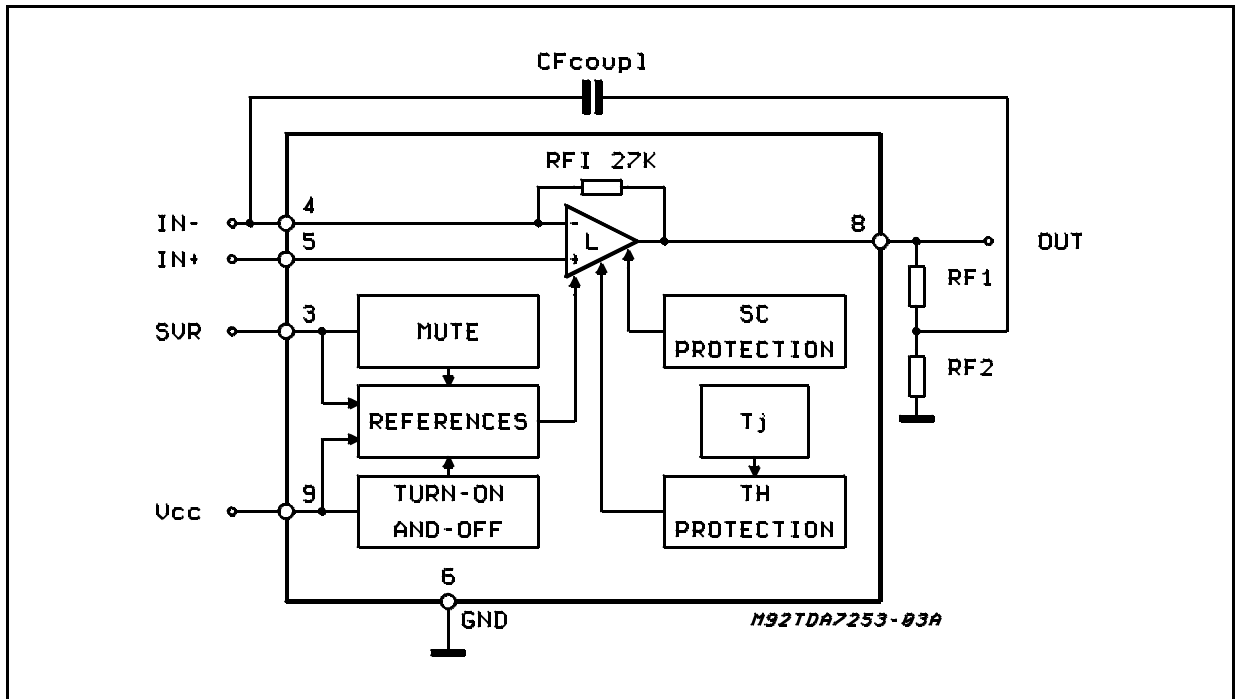
**ABSOLUTE MAXIMUM RATINGS**

Symbol	Parameter	Value	Unit
$V_S$	Supply Voltage	35	V
$I_o$	Output Peak Current (repetitive $f > 20\text{Hz}$ )	2.5	A
$I_o$	Output Peak Current (non repetitive, $t = 100\mu\text{s}$ )	3.5	A
$P_{tot}$	Total Power Dissipation ( $T_{case} = 70^\circ\text{C}$ )	25	W
$T_{op}$	Operating Temperature Range	0 to 70	$^\circ\text{C}$
$T_{stg,Tj}$	Storage & Junction Temperature	-40 to 150	$^\circ\text{C}$

**PIN CONNECTION (Top view)**



**Figure 1: Application Circuit**



## THERMAL DATA

Symbol	Parameter	Value	Unit
$R_{th\ j-case}$	Thermal resistance junction to case	Max 3	$^{\circ}C/W$

**ELECTRICAL CHARACTERISTICS** (Refer to the test and application circuit,  $V_S = 26V$ ;  $R_L = 8\Omega$ ;  $G_v = 30dB$ ;  $f = 1KHz$ ;  $T_{amb} = 25^{\circ}C$  unless otherwise specified.)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
$V_S$	Supply Voltage		10		32	V
$V_O$	Quiescent Output Voltage			12.5		V
$I_q$	Total Quiescent Current			40		mA
$P_O$	Output Power	$d = 10\%$ $d = 1\%$	8	10 8		W W
$d$	Total Harmonic Distortion	$P_O = 1W$		0.03		%
$R_I$	Input Resistance		100	200		$K\Omega$
$f_L$	Low Frequency Roll-off (-3dB)			40		Hz
$f_H$	High Frequency Roll-off (-3dB)			80		KHz
$e_N$	Total Input Noise Voltage	A Curve; $R_S = 10K\Omega$ $f = 22Hz$ to $22KHz$ ; $R_S = 10K\Omega$		2 2.5	10	mV $\mu V$
SVR	Supply Voltage Rejection	$R_S = 10K\Omega$ ; $f = 100Hz$ ; $V_r = 0.5V$		60		dB
$V_{TMUTE}$	Mute Threshold			0.8		V
$V_{TPLAY}$	Play Threshold		5			V
$A_M$	Mute Attenuation		80	100		dB
$I_{qMUTE}$	Quiescent Current Mute			7	10	mA

Note: to avoid pop-on noise  $\frac{C_F}{C_{SVR}} \leq 1$

Figure 1: Output Power vs. Supply Voltage

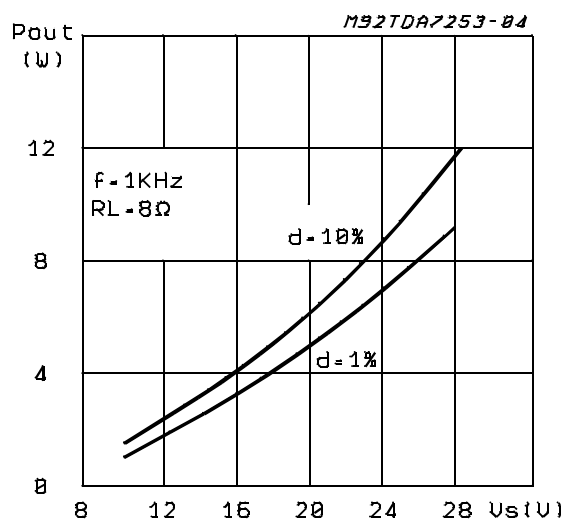
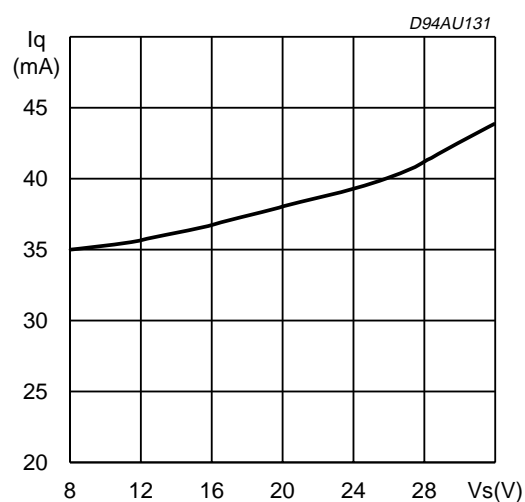
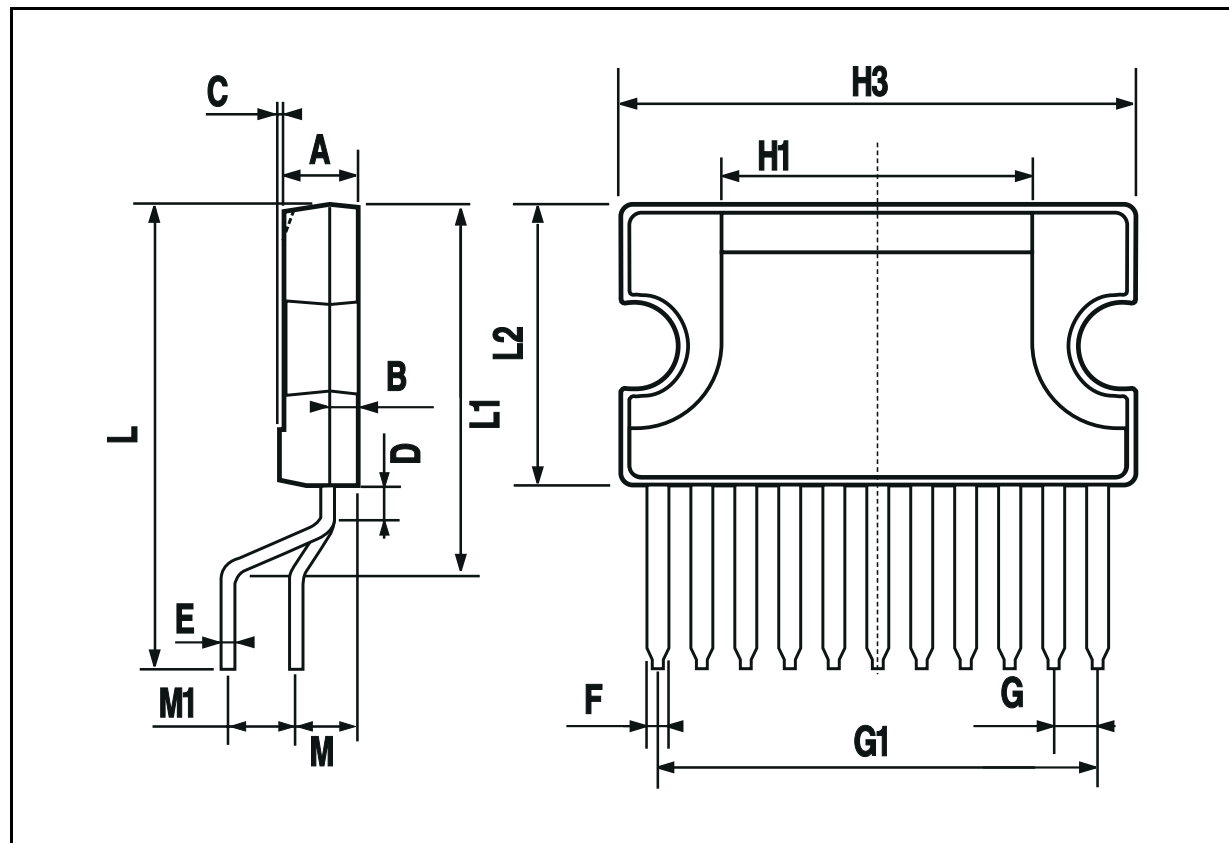


Figure 2: Quiescent Current vs. Supply Voltage



CLIPWATT11 PACKAGE MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			3.10			0.122
B			1.10			0.04
C		0.15			0.006	
D		1.50			0.059	
E		0.52			0.02	
F		0.80			0.03	
G		1.70			0.066	
G1		17.00			0.66	
H1		12.00			0.48	
H3		20.00			0.79	
L		17.90			0.70	
L1		14.40			0.57	
L2		11.00			0.43	
M		2.54			0.1	
M1		2.54			0.1	



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