



TDA7266N

LINEAR INTEGRATED CIRCUIT

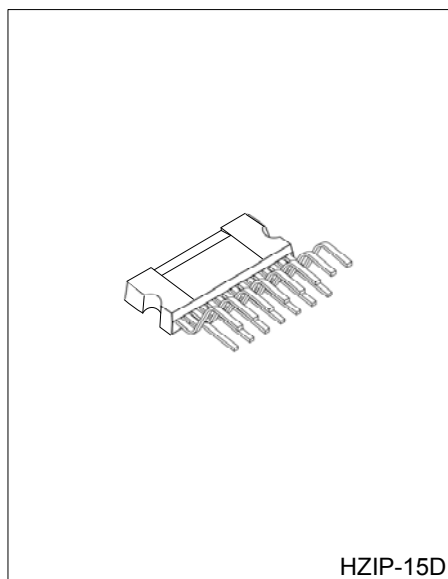
7+7W DUAL BRIDGE AMPLIFIER

■ DESCRIPTION

The UTC **TDA7266N** is a 7+7W dual bridge amplifier. This device is suitable for applications, such as TV and Portable Radio apparatus.

■ FEATURES

- * Internally-fixed gain
- * Power supply varies from 3V to 18V
- * With minimum external components required:
 - No SWR capacitor
 - No bootstrap
 - No boucherot cells
- * STAND-BY and MUTE functions
- * Protection circuit required:
 - Short circuit protection
 - Thermal overload protection



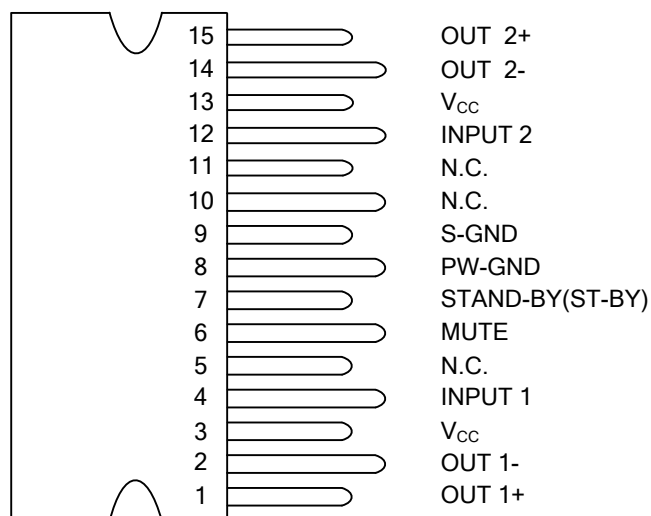
HZIP-15D

■ ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
TDA7266NL-J15-D-T	TDA7266NG-J15-D-T	HZIP-15D	Tube

TDA7266NG-J15-D-T (1) Packing Type (2) Package Type (3) Lead Plating	(1) T: Tube (2) J15-D: HZIP-15D (3) G: Halogen Free, L: Lead Free
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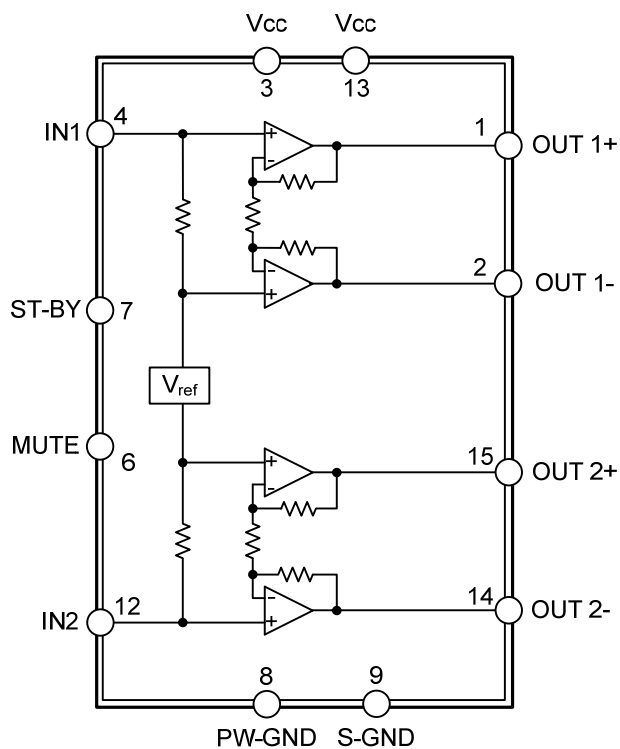
■ PIN CONFIGURATION (Top View)



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	OUT 1+	NOINVERSING OUTPUT OF CHANNEL 1
2	OUT 1-	INVERSING OUTPUT OF CHANNEL 1
3	V _{CC}	SUPPLY VOLTAGE
4	INPUT 1	INPUT OF CHANNEL 1
5	N.C.	NOT CONNECT
6	MUTE	MUTE THRESHOLD
7	STAND-BY	STAND-BY THRESHOLD
8	PW-GND	GND OF POWER
9	S-GND	GND OF SIGNAL
10	N.C.	NOT CONNECT
11	N.C.	NOT CONNECT
12	INPUT 2	INPUT OF CHANNEL 2
13	V _{CC}	SUPPLY VOLTAGE
14	OUT 2-	INVERSING OUTPUT OF CHANNEL 2
15	OUT 2+	NOINVERSING OUTPUT OF CHANNEL 2

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{CC}	20	V
Output Peak Current (internally limited)	I_{OUT}	2	A
Power Dissipation ($T_a = 70^\circ\text{C}$)	P_D	20	W
Junction Temperature	T_J	+125	$^\circ\text{C}$
Operating Temperature	T_{OPR}	0 ~ +70	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	48	$^\circ\text{C/W}$
Junction to Case	θ_{JC}	2.5	$^\circ\text{C/W}$

■ ELECTRICAL CHARACTERISTICS ($V_{CC}=11\text{V}$, $R_L=8\Omega$, $f=1\text{kHz}$, $T_a=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Range	V_{CC}		3	11	18	V
Output Offset Voltage	$V_{O(OFF)}$				120	mV
Total Output Noise Voltage	eN	A curve, $f=20\text{Hz}\sim 20\text{kHz}$		150		μV
Total Quiescent Current	I_Q			48	65	mA
Input Resistance	R_{IN}		25	30		k Ω
Output Power	P_{OUT}	THD=10%	6.3	7		W
Total Harmonic Distortion	THD	$P_{OUT}=1\text{W}$		0.05	0.2	%
		$P_{OUT}=0.1\sim 2\text{W}$, $f=100\text{Hz}\sim 15\text{kHz}$			1	%
Crosstalk	C_T		46	60		dB
Closed Loop Voltage Gain	Gv		25	26	27	dB
Voltage Gain Matching	ΔGv				0.5	dB
Supply Voltage Rejection	SVR	$f=100\text{Hz}$, $V_R=0.5\text{V}$	40	56		dB
Thermal Threshold	T_t			150		$^\circ\text{C}$

MUTE FUNCTION

Mute Threshold	VM_{THD}	for $V_{CC}>6.4\text{V}$, $V_{OUT}= -30\text{dB}$	2.3	2.9	4.1	V
		for $V_{CC}<6.4\text{V}$, $V_{OUT}= -30\text{dB}$	$V_{CC}/2-1.0$	$V_{CC}/2-0.75$	$V_{CC}/2-0.5$	V
Mute Attenuation	A_{MUTE}		60	80		dB

STAND BY FUNCTION

STAND-BY Threshold	VT_{ST-BY}		0.8	1.3	1.8	V
STAND-BY Current $V_6=\text{GND}$	I_{ST-BY}				100	μA

■ APPLICATION SUGGESTION

1. For Microprocessor Application

In order to avoid annoying "Pop-Noise" during Turn-On/Off transients, it is necessary to guarantee the right St-by and mute signals sequence. It is quite simple to obtain this function using a microprocessor.

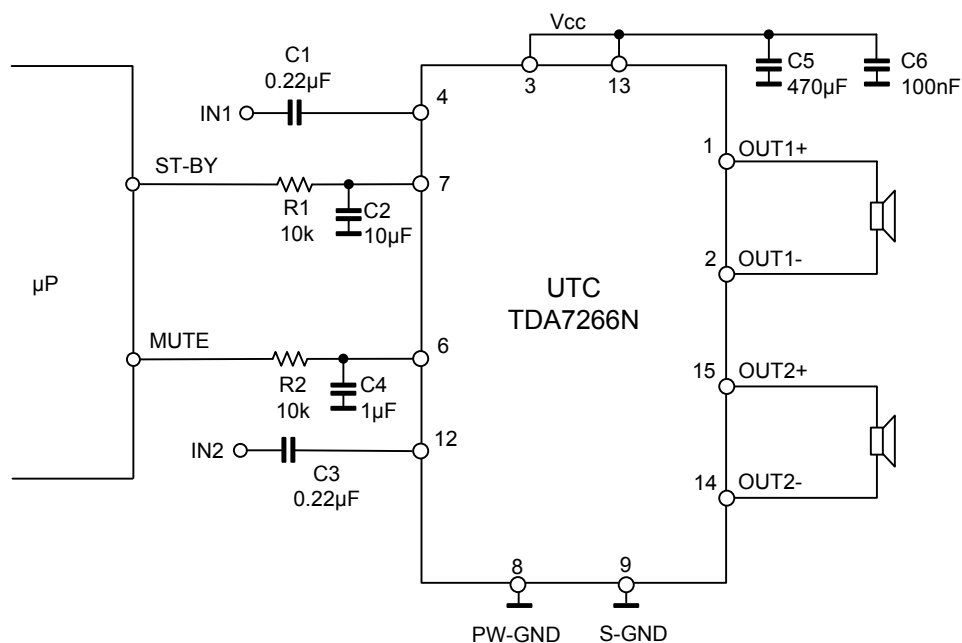


Fig 1. Microprocessor Application

■ APPLICATION SUGGESTION(Cont.)

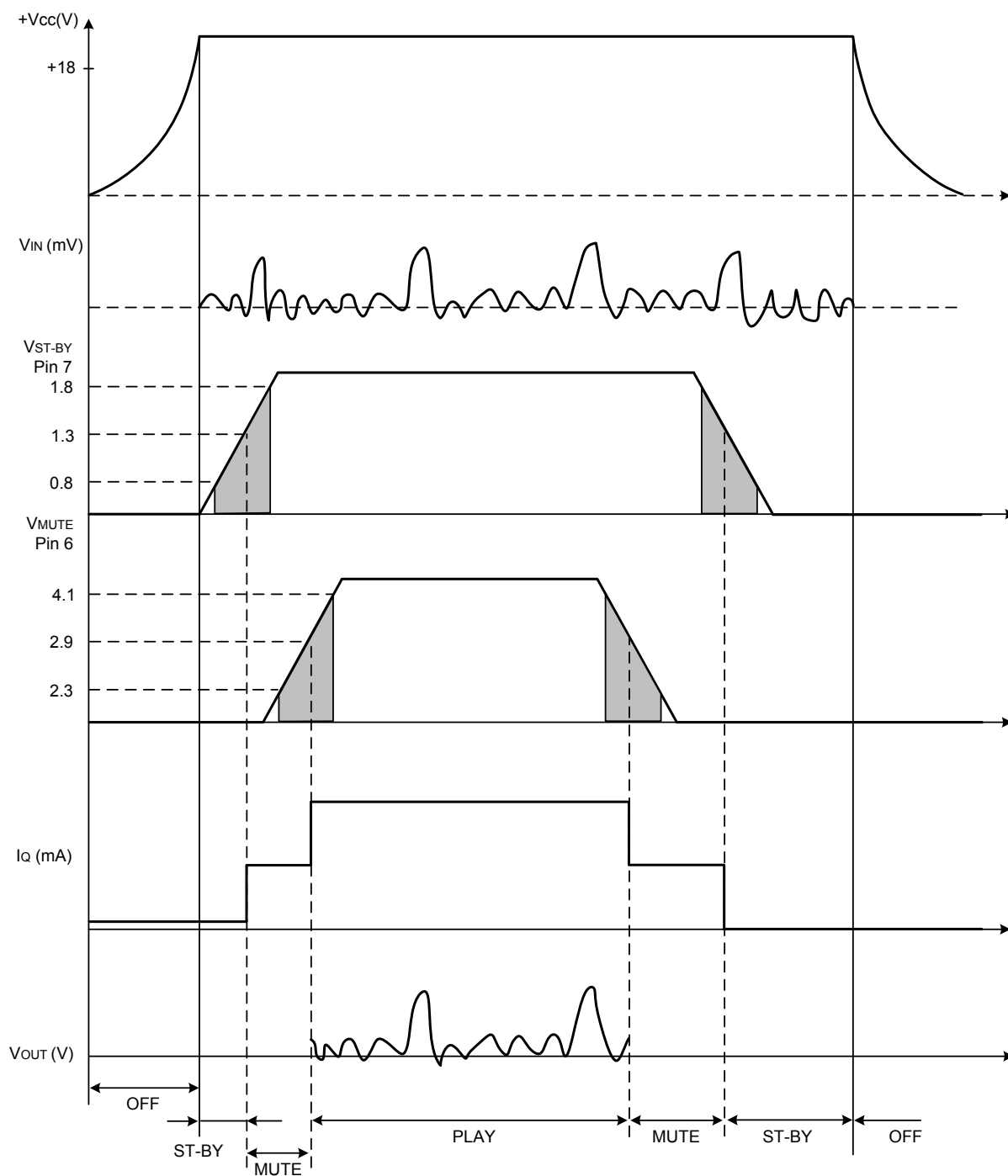


Fig 2. Microprocessor Driving Signals

■ APPLICATION SUGGESTION(Cont.)

2. For Low Cost Application

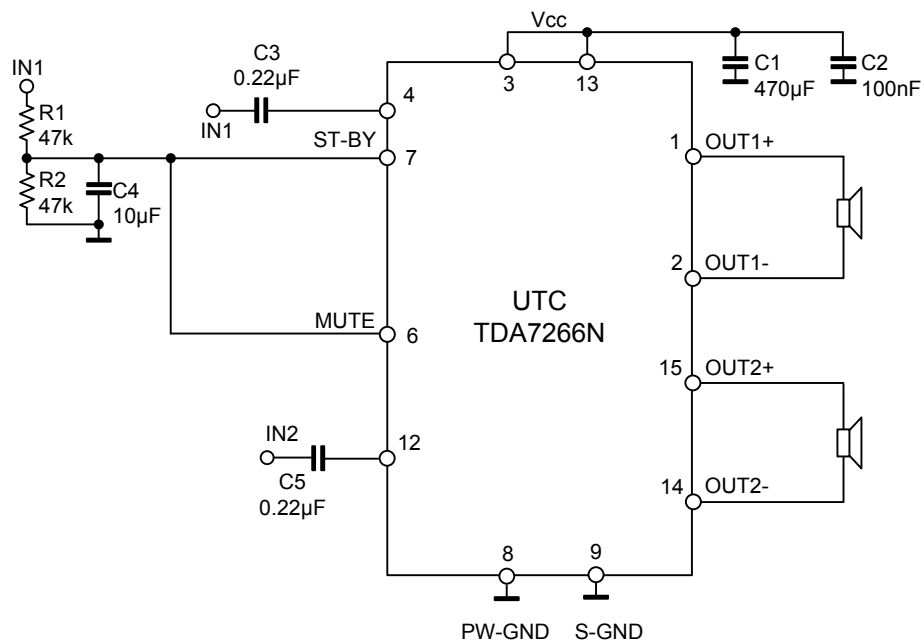
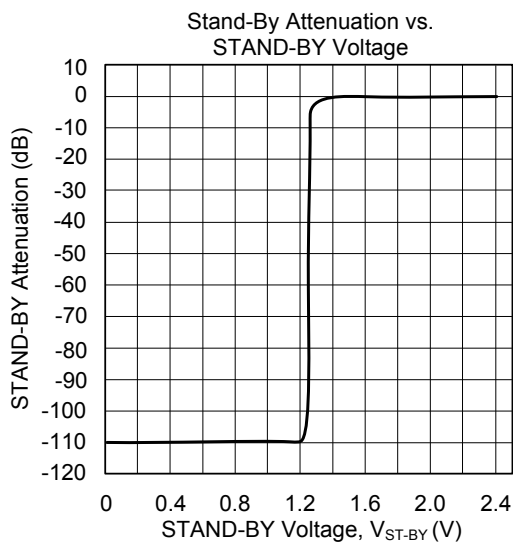
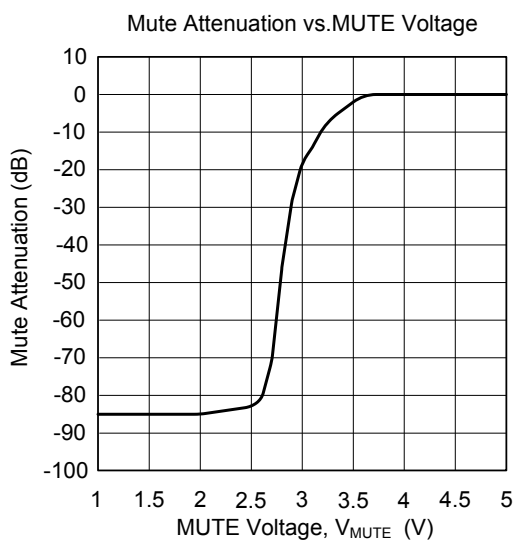
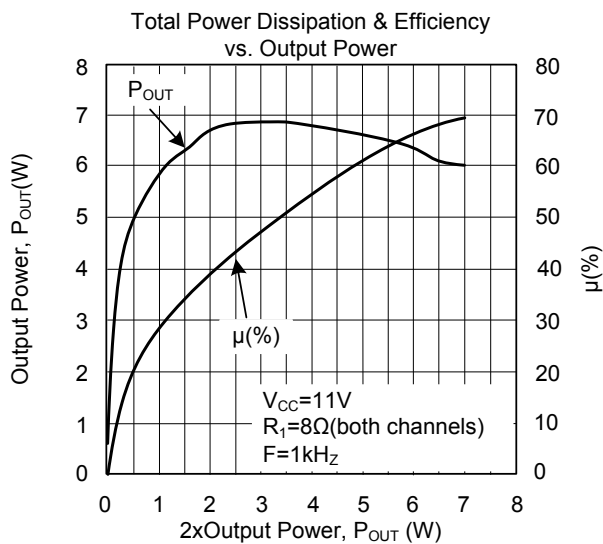
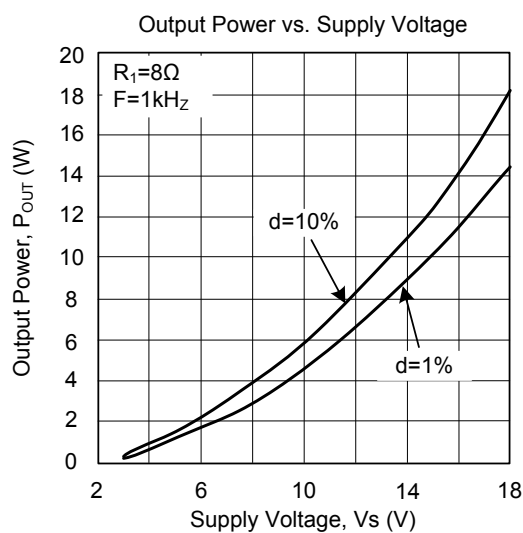
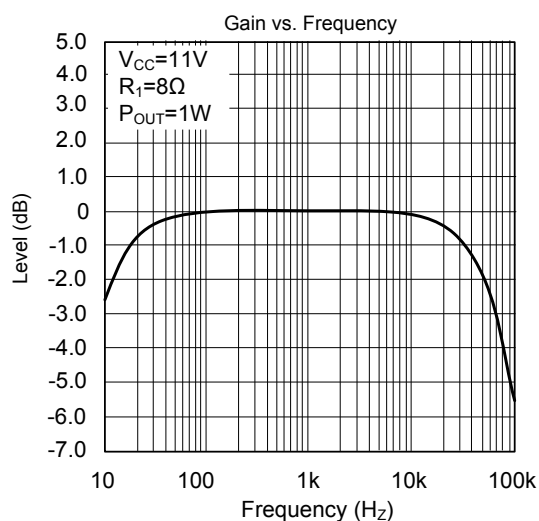
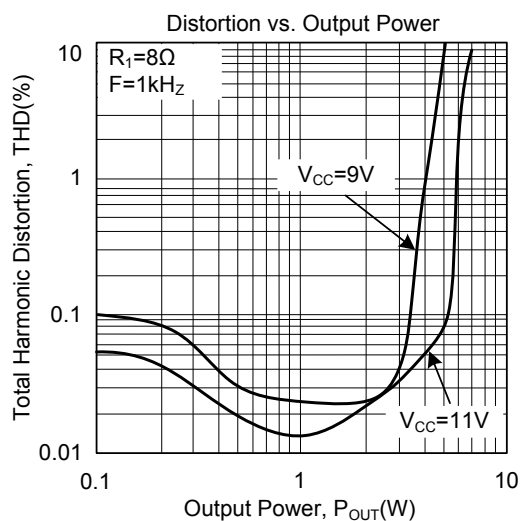
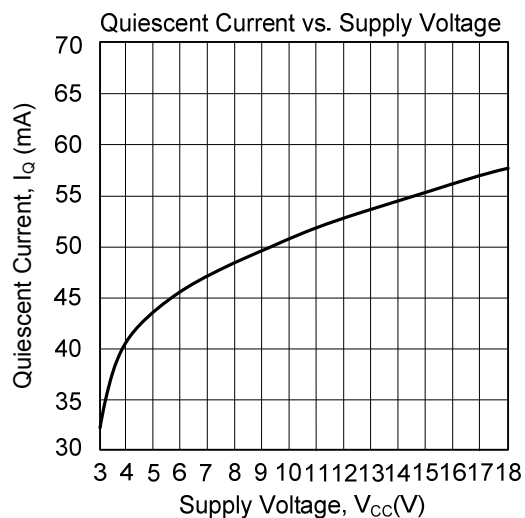


Fig 3. Stand Alone Low Cost Application

TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS



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