



## TDA7266N

### LINEAR INTEGRATED CIRCUIT

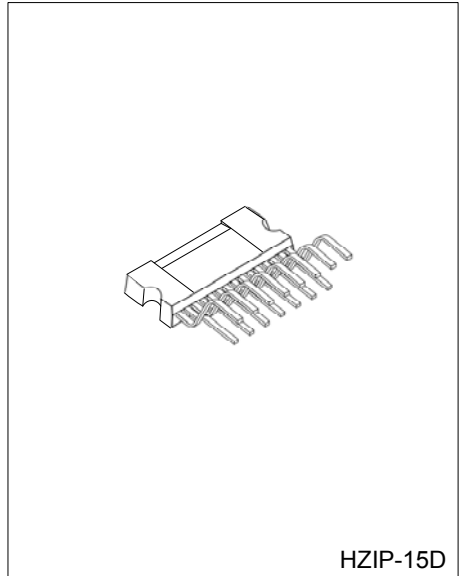
## 7+7W DUAL BRIDGE AMPLIFIER

### 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



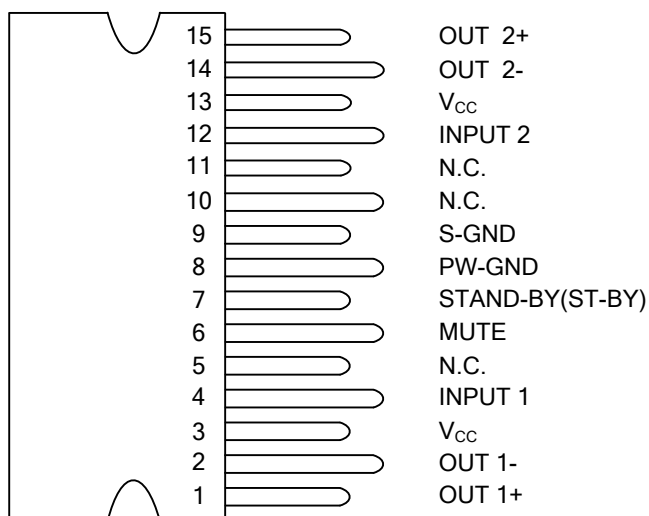
HZIP-15D

### ORDERING INFORMATION

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

<p>TDA7266NG-J15-D-T</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Lead Plating</li> </ul>	<ul style="list-style-type: none"> <li>(1) T: Tube</li> <li>(2) J15-D: HZIP-15D</li> <li>(3) G: Halogen Free, L: Lead Free</li> </ul>
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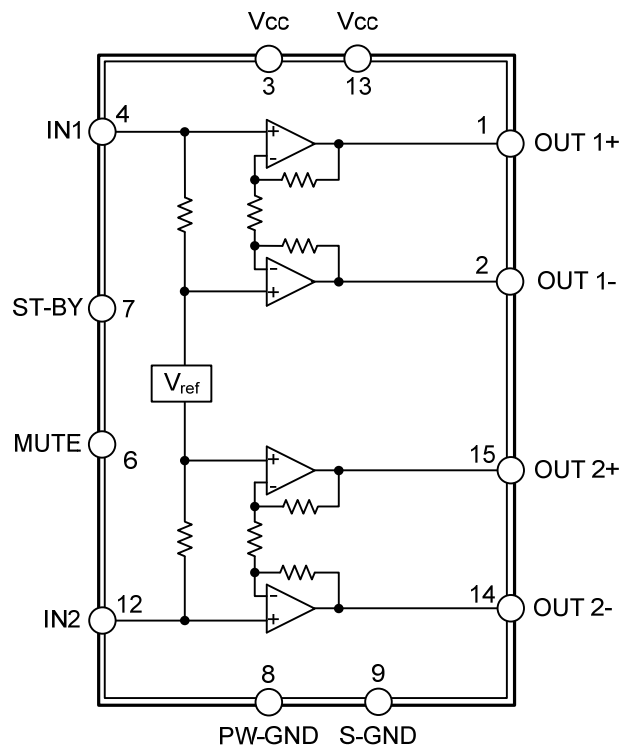
### ■ PIN CONFIGURATION (Top View)



### ■ 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 <sub>CC</sub>	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 <sub>CC</sub>	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	$\theta_{JA}$	48	$^\circ\text{C/W}$
Junction to Case	$\theta_{JC}$	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		$\mu\text{V}$
Total Quiescent Current	$I_Q$			48	65	mA
Input Resistance	$R_{IN}$		25	30		k $\Omega$
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	$\Delta Gv$				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	$\mu\text{A}$

### ■ 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.

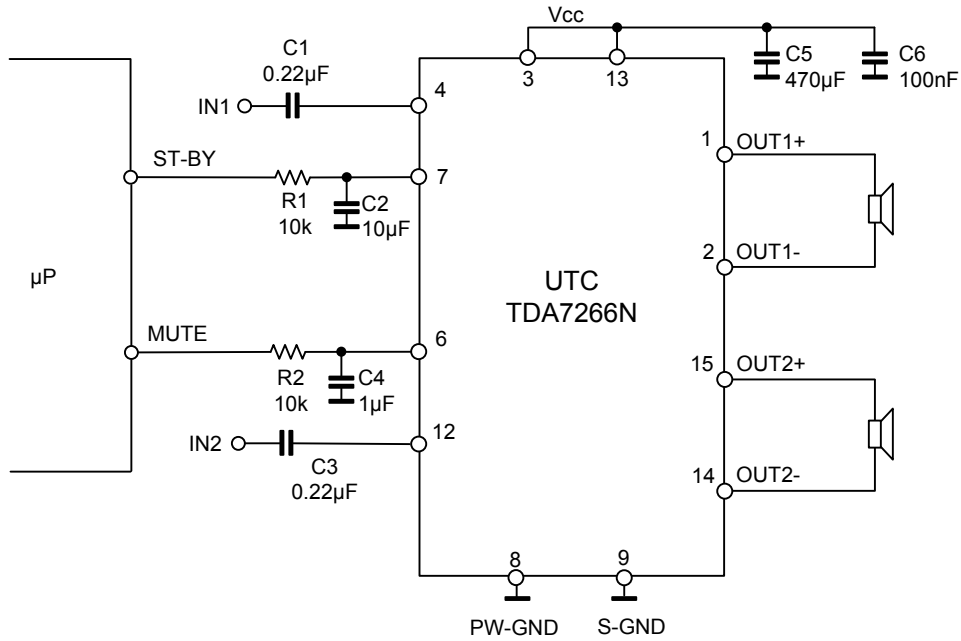


Fig 1. Microprocessor Application

■ APPLICATION SUGGESTION(Cont.)

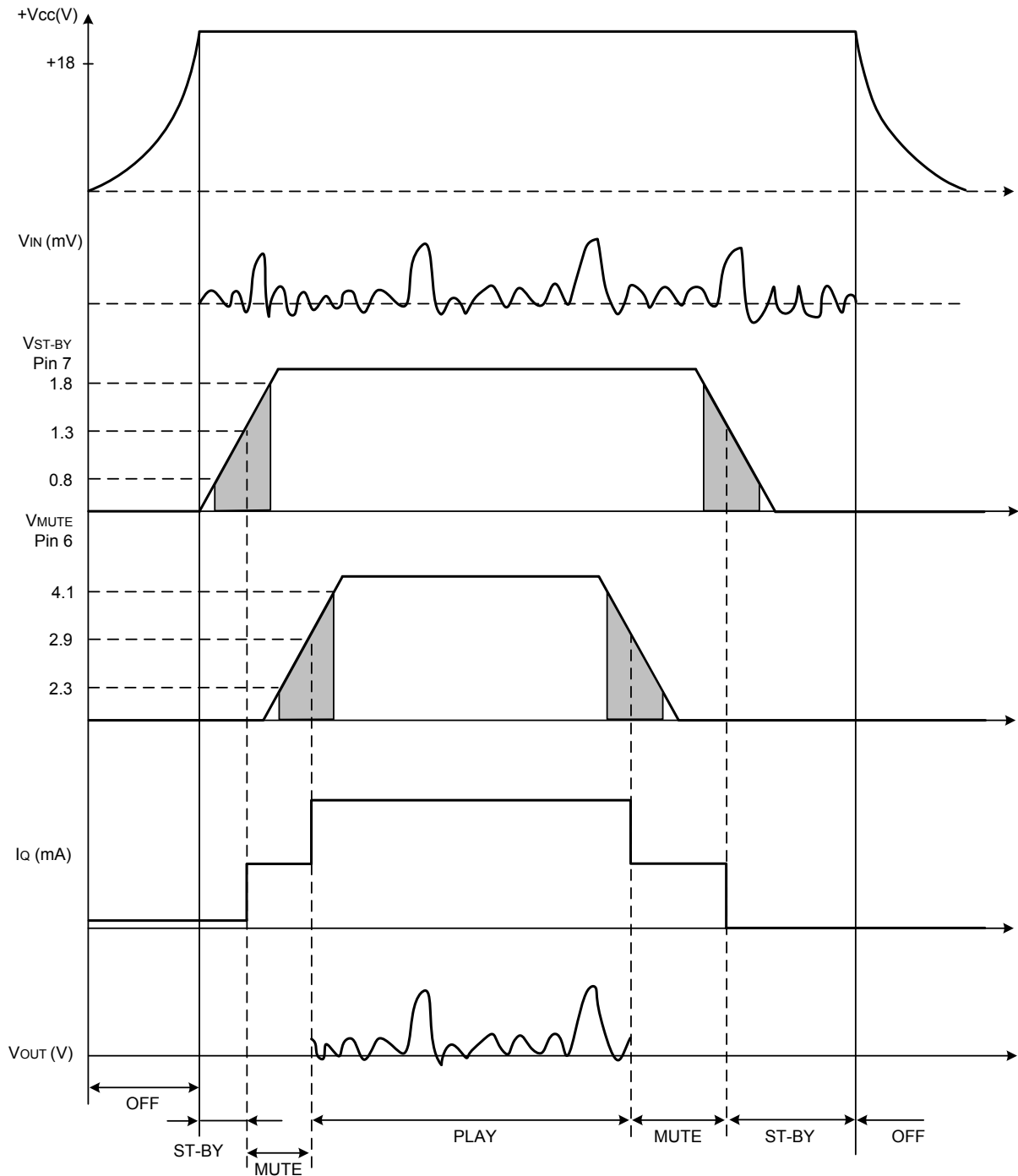


Fig 2. Microprocessor Driving Signals

■ APPLICATION SUGGESTION(Cont.)

2. For Low Cost Application

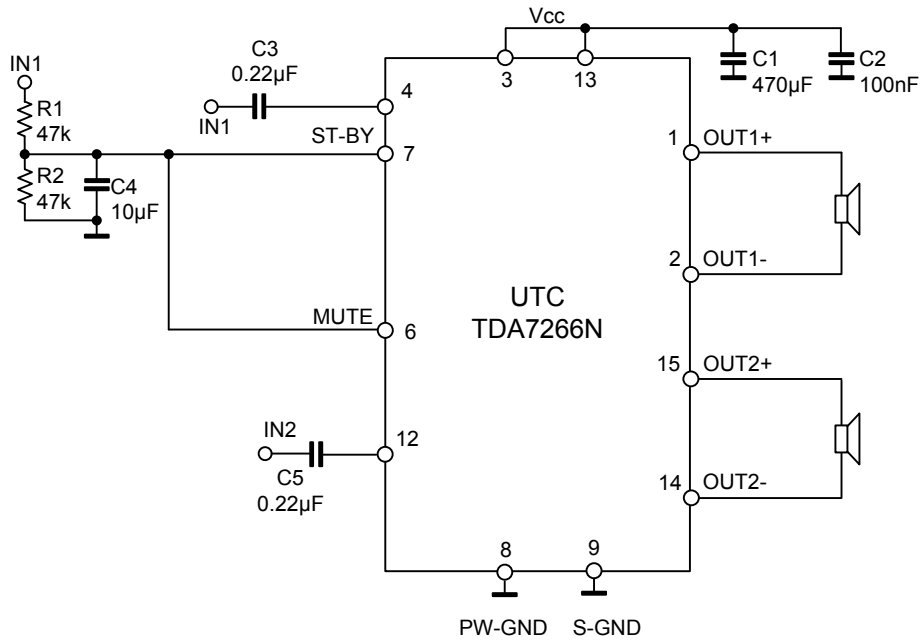
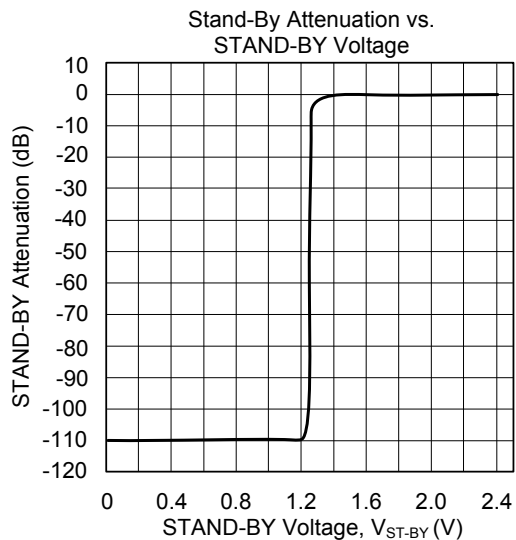
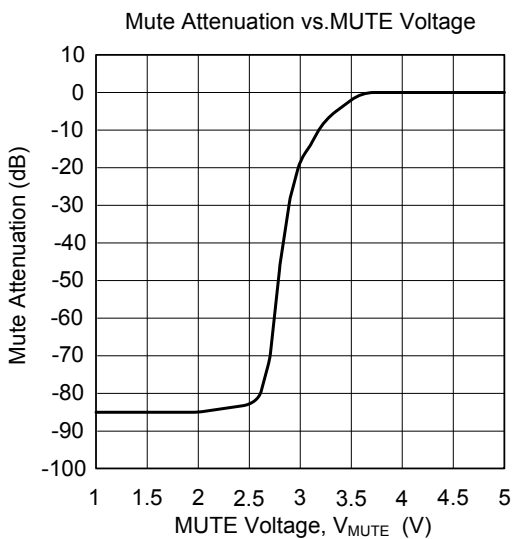
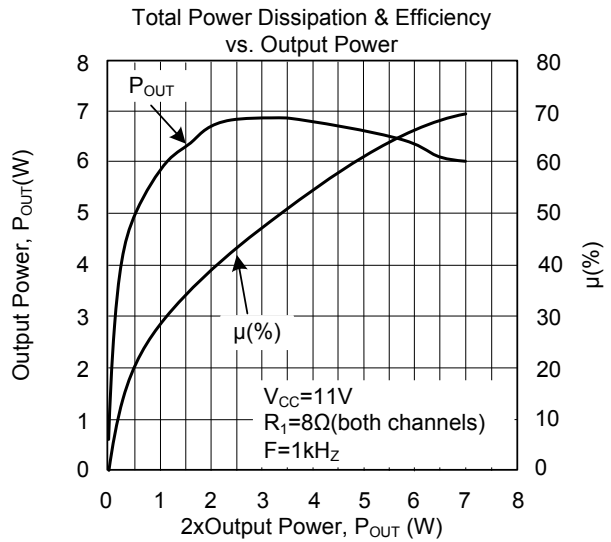
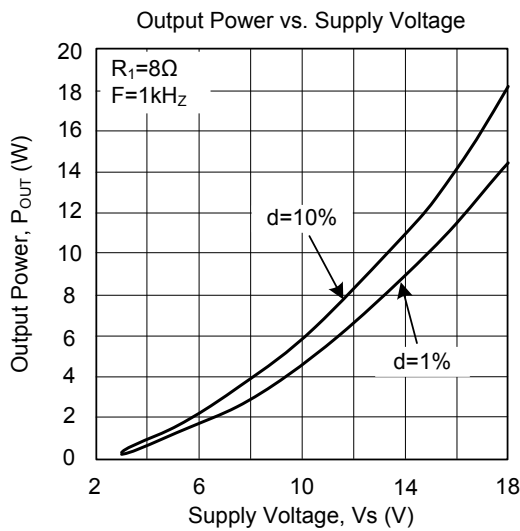
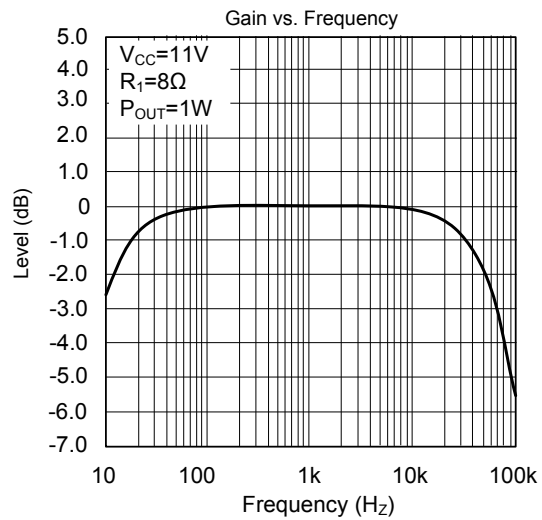
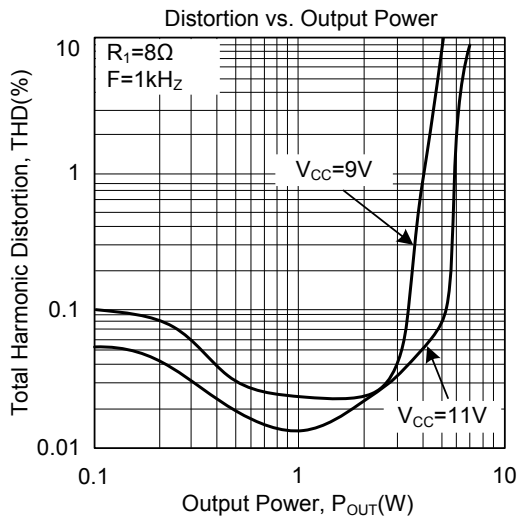


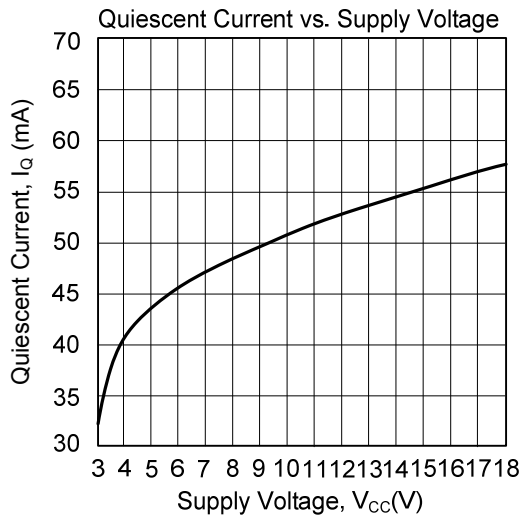
Fig 3. Stand Alone Low Cost Application

### TYPICAL CHARACTERISTICS





### ■ TYPICAL CHARACTERISTICS



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