



## **3W Mono Class AB Audio Amplifier**

General Description: CM8600C is an audio amplifier of class AB.

The CM8600C is unity-gain stable and can be configured by external gain-setting resistors, It features a low-power consumption shutdown mode with very low shutdown current, and thermal shutdown protection. It also utilizes circuitry to reduce "clicks and pops" during device turn-on and turn-off.

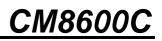
## Features:

- 1. Power output at 4.2/supply,  $4\Omega$  load, THD+N<10%, is 1.6W.
- 2. Power output at 5V supply,  $8\Omega$  load, THD+N<10%, is 1.5W.
- 3. Operating supply voltage: VDD =1.8V~5.5V.
- 4. Typical shutdown current: 0.2uA.
- 5. Improved pop & click circuitry eliminates noise during turn-on and turn-off transitions
- 6. SOP 8 packages.

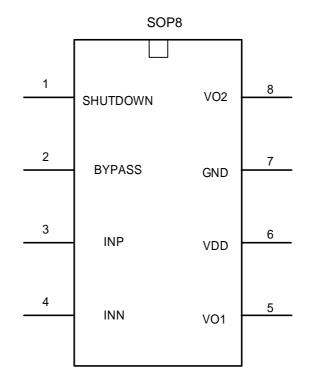
<b>Electrical</b>	Characteristics:
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Symbol	Parameter	Conditions	Typical	Limit	Units
I <sub>DD</sub>	Quiescent power	V <sub>IN</sub> =0V,I <sub>O</sub> =0A,No Load	2.5	15	mA
	supply current				
I <sub>SD</sub>	Shutdown current	$V_{SD} = V_{DD}$	0.2	4.0	μA
V <sub>SDIH</sub>	Shutdown voltage	V <sub>DD</sub> =5V	1.5		V
	input high				
V <sub>SDIL</sub>	Shutdown voltage	V <sub>DD</sub> =5V	1.3		V
	input low				
V <sub>os</sub>	Output offset voltage	$V_{IN}$ =0V, No Load	10	50	mV
Po	Output power (8 $\Omega$	THD+N=10%(max); f=1kHz	1.5	1.7	W
	load)				
	Output power (4 $\Omega$		2.5	3	
	load)				
T <sub>WU</sub>	Wake-up time		100		ms
THD+N	Total harmonic	P <sub>o</sub> =0.5Wrms;f=1kHz	0.1	1.0	%
	distortion + noise		0.1	1.0	
PSRR	Power supply rejection	V <sub>ripple</sub> =200mV	-63 (217Hz)	-55	dB
	ratio		-77 (1kHz)		



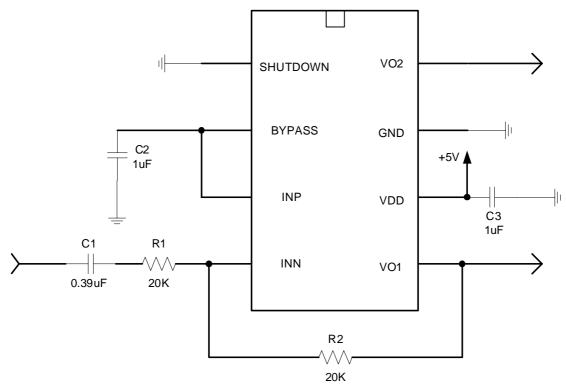


## Packaging information:



## **Typical application:**

The CM8600C is unity-gain stable and can be configured by external gain-setting resistors, It features a low-power consumption shutdown mode with very low shutdown current, and



增益放大可以改变 R2 的阻值到 100K