

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.

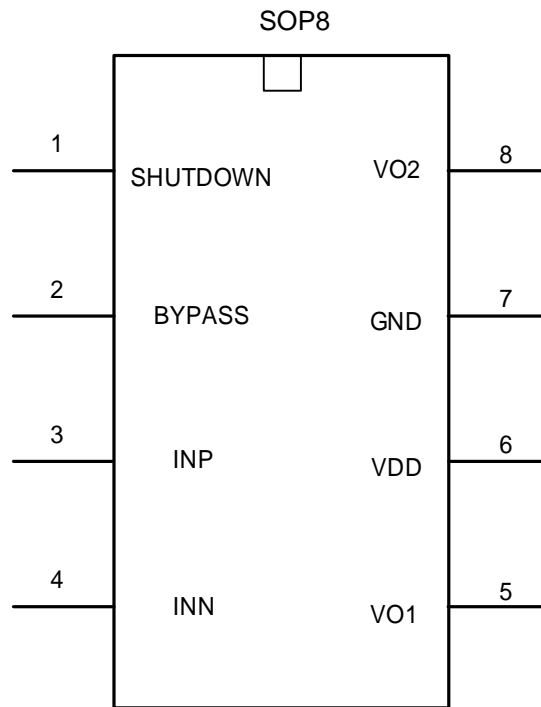
Features:

1. Power output at 4.2V supply, 4Ω load, THD+N<10%, is 1.6W.
2. Power output at 5V supply, 8Ω 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.

Electrical Characteristics:

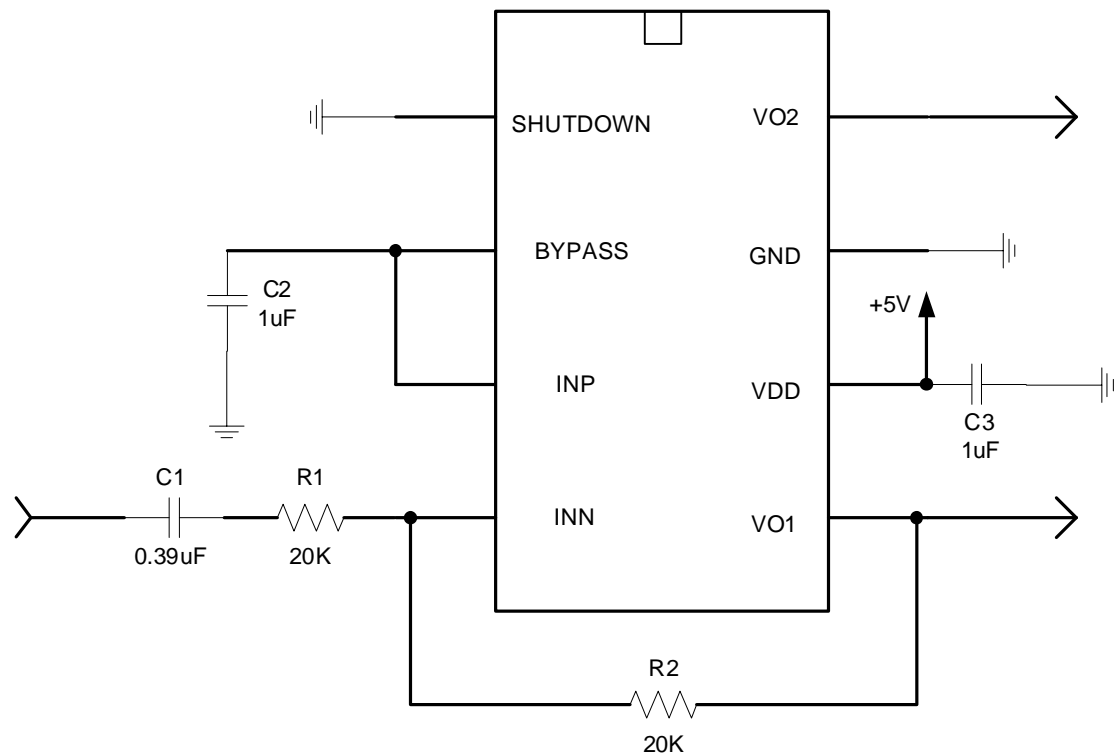
Symbol	Parameter	Conditions	Typical	Limit	Units
I _{DD}	Quiescent power supply current	V _{IN} =0V,I _O =0A,No Load	2.5	15	mA
I _{SD}	Shutdown current	V _{SD} = V _{DD}	0.2	4.0	μA
V _{SDIH}	Shutdown voltage input high	V _{DD} =5V	1.5		V
V _{SDIL}	Shutdown voltage input low	V _{DD} =5V	1.3		V
V _{OS}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

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