

## 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, 4 Ω load, THD+N<10%, is 1.6W.
2. Power output at 5V supply, 8 Ω 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 <sub>DD</sub>	Quiescent power supply current	V <sub>IN</sub> =0V, I <sub>O</sub> =0A, No Load	2.5	15	mA
I <sub>SD</sub>	Shutdown current	V <sub>SD</sub> = V <sub>DD</sub>	0.2	4.0	μA
V <sub>SDIH</sub>	Shutdown voltage input high	V <sub>DD</sub> =5V	1.5		V
V <sub>SDIL</sub>	Shutdown voltage input low	V <sub>DD</sub> =5V	1.3		V
V <sub>OS</sub>	Output offset voltage	V <sub>IN</sub> =0V, No Load	10	50	mV
P <sub>O</sub>	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 <sub>WU</sub>	Wake-up time		100		ms
THD+N	Total harmonic distortion + noise	P <sub>O</sub> =0.5Wrms;f=1kHz	0.1	1.0	%
PSRR	Power supply rejection ratio	V <sub>ripple</sub> =200mV	-63 (217Hz) -77 (1kHz)	-55	dB

