



*Audio Silicon
Specialists™*

Precision Monolithics Inc.

SSM-2018

VOLTAGE-CONTROLLED
AMPLIFIER/OVCE

ADVANCE PRODUCT INFORMATION

FEATURES

- Wide Dynamic Range 118dB (Class AB Typ)
..... 108dB (Class A Typ)
- Improved THD and IMD over Gain and Attenuation
- Low Control Feedthrough 500 μ V (Class AB Typ)
..... 2mV (Class A Typ)
- Buffered Control Port
- Accepts Low or High Impedance Inputs
- Extended Industrial Temperature Range -40°C to +85°C
- Few External Components
- Low Cost

APPLICATIONS

- Mix Console Fader Automation Systems
- Compressor/Limiters
- Noise Gates
- Noise Reduction Systems
- Telephone Line Interfaces
- Surround Sound Systems
- Automatic or Remote Volume Controllers
- Voltage-Controlled Equalizers
- Voltage-Controlled Panners

ORDERING INFORMATION

PACKAGE	OPERATING TEMPERATURE RANGE
PLASTIC 16-PIN	
SSM2018P	XIND*

* XIND = -40°C to +85°C

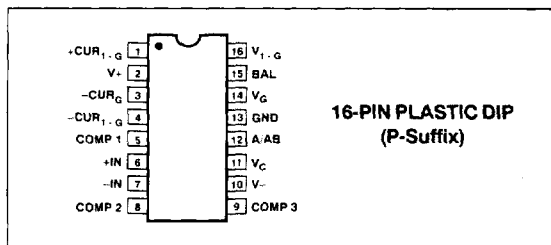
GENERAL DESCRIPTION

The SSM-2018 is a pin compatible upgrade to the SSM-2014, offering improved specifications while maintaining applications flexibility. Improvements include lower noise and lower distortion, particularly over gain and attenuation, with increased bandwidth. PMI's thin-film resistor capability results in fewer required external components than the SSM-2014.

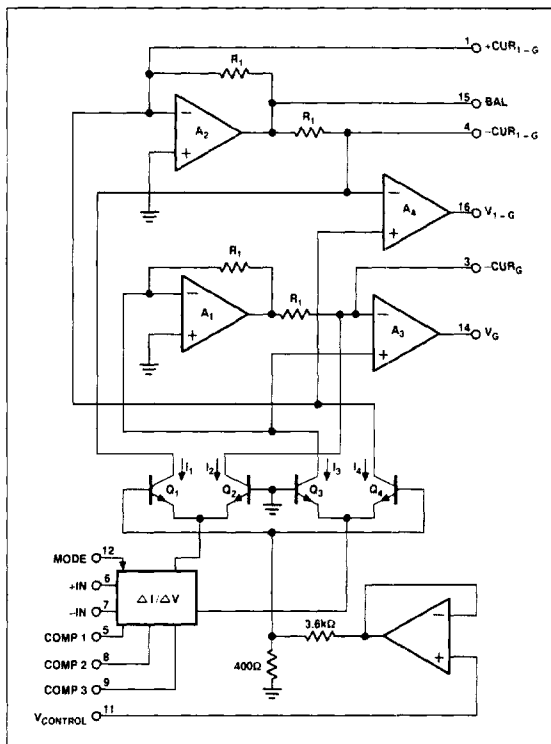
Differential inputs and outputs are provided that permit voltage or current operation. An additional feature is the SSM-2018's programmable gain core, which allows Class A, AB, intermediate, or "sliding bias" operation. As a result, the SSM-2018 is an excellent choice for all common VCA applications, as well as Operational Voltage-Controlled Element (OVCE) functions such as voltage-controlled panners and equalizers.

Combined with a PM-7524 DAC and SSM-2300 8-channel multiplexed sample-and-hold, the SSM-2018 enables the design of high performance fader automation systems with few components. The SSM-2018 and SSM-2110 can be used as the nucleus of a state-of-the-art dynamic range processor.

PIN CONNECTIONS



BLOCK DIAGRAM



SSM AUDIO PRODUCTS