

Product Summary Sheet

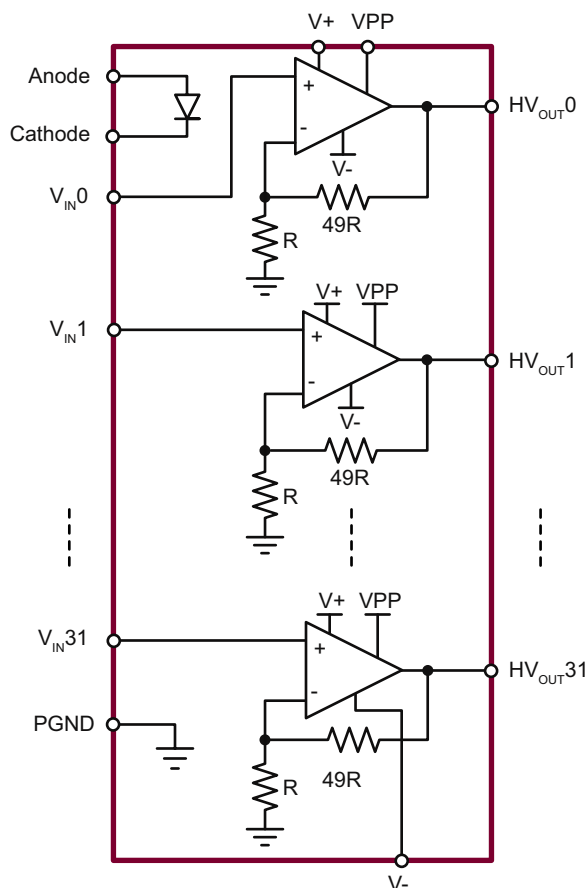
32-Channel High Voltage Amplifier Array

Applications:

- ▶ MEMS Driver (microelectro-mechanical systems)
- ▶ Piezoelectric Transducer Driver
- ▶ Optical Crosspoint Switches (using MEMS technology)



100-Lead MQFP (FG)



Block Diagram

Product Overview:

The HV254 is a 32-channel high voltage amplifier array integrated circuit. Each channel is configured as a noninverting amplifier. The outputs can swing up to 250V with a guaranteed slew rate of 3V/μs while driving a 100pF load. The amplifier has an internal closed loop gain of 34dB or 50V/V saving the user from having to use external gain setting resistors. A 5V signal applied to the input of an amplifier will therefore create an output voltage of 250V.

The HV254 operates on a 275V supply and two low voltage supplies, +/-5V. It is designed to operate on minimal power while still maintaining a slew rate of 3V/μs. To further reduce power consumption, high value gain setting resistors are used for the internal feedback path. An integrated diode is also included to help monitor the die temperature.

Features:	Benefits:
32 independent high voltage amplifiers	Saves board space
Output voltage up to 250V	Provides adequate movement for an optical MEMS switch
3V/μs output slew rate	Provides adequate switching time from one line to another
Integrated feedback resistors	Saves board space. Reduces component count and simplifies board layout.
High value internal feedback resistors. Very low operating current (typically 45μA per channel)	Minimizes power consumption and dissipation
Integrated silicon diode for temperature sensing	Allows for external temperature compensation or thermal protection



120310

32-Channel High Voltage Amplifier Array

Ordering Information / Availability

Part Number	Package	Samples	Lead Time
HV254FG-G	100-Lead MQFP (FG)	Now	4-5 Weeks
HV254X	Die Form	---	Consult Factory

-G indicates the part is RoHS compliant (Green).



Product Contact

For any questions regarding the HV254, please contact your local area Supertex sales office, or contact the main office in the US at:

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