Product Summary Sheet

Applications

- Tunable Laser
- MEMS driver
- Test equipment
- Piezoelectric transducer driver
- Braille driver

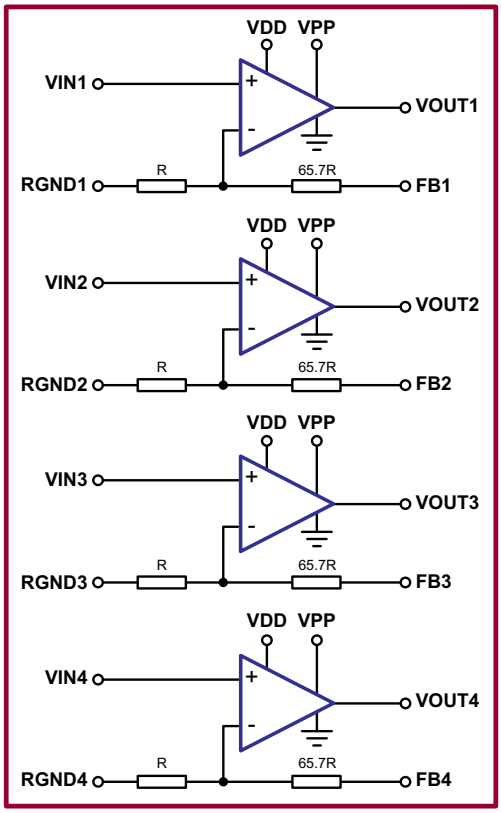
24-Lead TSSOP

For more info about Supertex:

4/17/13

HV264

Quad, High Voltage, Amplifier Array



Block Diagram

Product Overview:

The Supertex HV264 is a quad high voltage amplifier array integrated circuit. It operates on a 200V high voltage supply and a 5.0V low voltage supply. Each channel has its own input and output.

When both VOUT and FB pins are connected together and RGND is set at 0V, a non-inverting amplifier is formed with closed loop gain of 66.7V/V. High value internal feedback resistors are used to minimize the power dissipation. The input voltage V_{IN} is designed for a range of 0.05V to 2.85V. The output can swing from 1.0V to V_{PP} -10V. A 2.85V input will cause the output to swing to 190V.

The HV264 is designed for maximum performance with minimal high voltage current. The high voltage current for each channel is less than 75µA. The typical output slew rate performance is 9.0V/µs.

Features:	Benefits:
Four independent high voltage amplifiers in TSSOP package	Takes minimal space on a printed circuit board. Great for applications with high channel density requirement
Output voltage up to 190V	Provides adequate voltage swing for optical MEMS switch application
Integrated feedback resistors	Reduces component count and simplifies board layout
Feedback connection available to use with an external feedback resistor	Flexible configuration for applications that require high gain precision
High value internal feedback resistors	Minimized power consumption and dissipation
Low operating current (typically 75µA per channel)	Minimized power consumption and dissipation

Supertex inc.

Quad, High Voltage, Amplifier Array

General Specifications

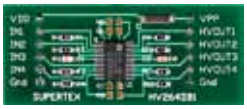
Device	HV_{OUT} max (V)	Quiescent Current I_{PP}/ channel (µA)	Slew Rate (V/µs)	Closed Loop Gain (V/V)	Feedback Resistance (MΩ)	HV_{OUT} Source max (mA)	HV_{OUT} Sink max (mA)	HV_{OUT} Capacitive Load max (pF)	Configuration	Output Current Limit
HV264	190	75	9	66.7	5.3	3	3	15	Amp Only	No

Ordering Information / Availability

Part Number	Package Option	Packing	Samples	Lead Time for Production Quantities
HV264TS-G	24-Lead TSSOP	2500/Reel	In Stock	4 - 6 Weeks ARO

-G denotes a lead (Pb)-free / RoHS compliant package

Demoboard

Part Number	Image	Description	Lead Time
HV264DB1		Quad, High Voltage Amplifier Array Demoboard	In Stock

Frequently Asked Questions:

Q: Can this operational amplifier be reconfigured with higher gain setting and higher gain precision?

A: Yes. This device with an internal feedback resistor is configured as an open loop topology. The feedback pin is available to accommodate the external feedback resistors. This opamp can be reconfigured to a different gain with external resistors. To obtain a higher gain precision, the external high precision resistors can be used to minimize the closed loop gain variation. A typical application circuit can be found in the datasheet.

Q: My application is sensitive to output variation over temperature. How does this device perform over temperature?

A: There are diagrams in the datasheet which show the output variation over temperature and time. Typically the output variation is about +40mV from -40°C to 85°C with respect to room temperature.

Q: Is the power up/down sequence critical?

A: Yes. Improper power up/down will cause permanent damage to the device.

Product Contact

Please visit ***www.supertex.com*** to view the full datasheet.
For further information about this product or other Supertex products, please contact your local area Supertex sales office.
Supertex sales contact information could be found at ***http://www.supertex.com/contact_sales_offices.html***.

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