

Product Summary Sheet

HV739

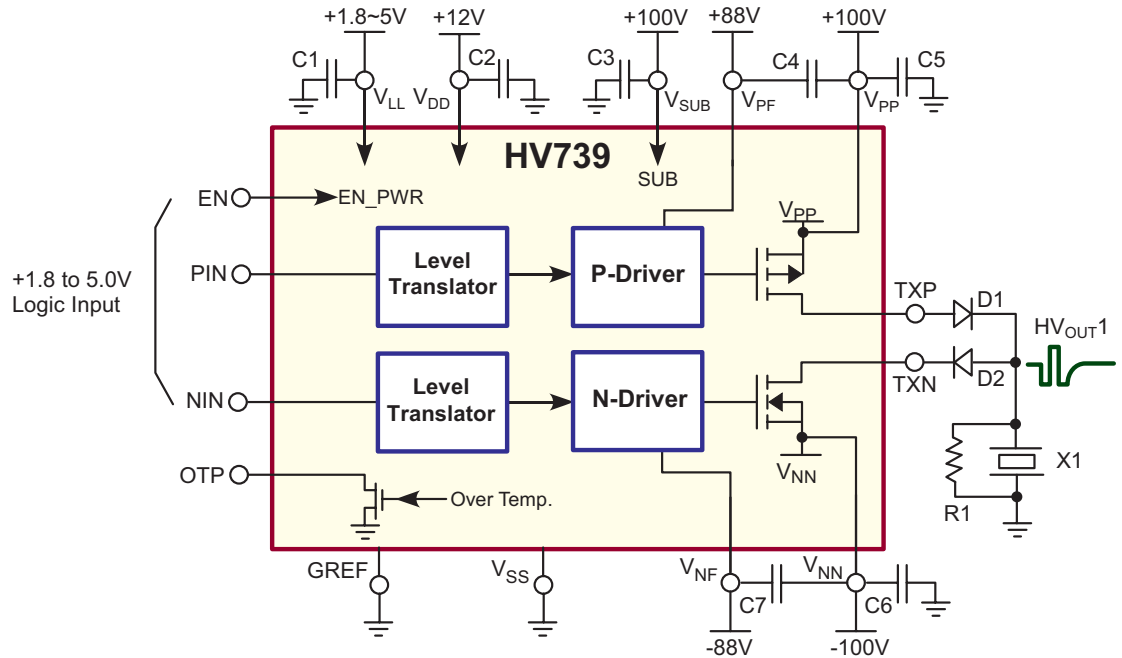
High Speed $\pm 100V$ 3.0A Ultrasound Pulser

Applications:

- ▶ NDT ultrasound transmission
- ▶ Piezoelectric transducer drivers
- ▶ Sonar, ranger and flow metering



32-Lead QFN (K6)



Typical Application Circuit

Product Overview:

The Supertex HV739 is a single channel monolithic 200V 3.0A high-speed pulser. It is designed for NDT and medical ultrasound applications. This high voltage and high-current integrated circuit can also be used for other piezoelectric, capacitive or MEMS sensor in ultrasonic transducer and sonar ranger applications.

HV739 consists of controller logic interface circuit, voltage level translators, MOSFET gate drives and high current power P-channel and N-channel power MOSFETs as the output stage.

The output stage of HV739 is designed to provide output peak currents over 3.3A with up to 200V swing. The P- and N-channel power FETs gate drivers are supplied by two floating 10 to 12VDC power supplies referenced to V_{PP} and V_{NN} . This direct coupling topology of the gate drivers not only saves two high voltage capacitors per channel, but also makes the PCB layout easier.

Features:	Benefits:
Bipolar +/-100V or unipolar 0 to 200V output voltage	Better ultrasound image resolution
+/-3.0A source and sink output current capability	Ideal for NDT ultrasound applications
Up to 10 MHz operating frequency	Wider ultrasound probe selections
32-lead QFN package	Small PCB space



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Supertex inc.

High Speed $\pm 100V$ 3.0A Ultrasound Pulser

Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Lead Time</u>
HV739K6-G	32-Lead QFN (Green)	Now	4-5 Weeks

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



Product Contact

For any questions regarding the HV739 please contact your local area Supertex sales office, or contact the main office in the US at:

Telephone: 800-222-8888
Fax: 408-222-4895
EMail: mktg@supertex.com
Website: www.supertex.com