

Product Summary Sheet

TC6320

N- and P-Channel Enhancement-Mode MOSFET Pair

Applications:

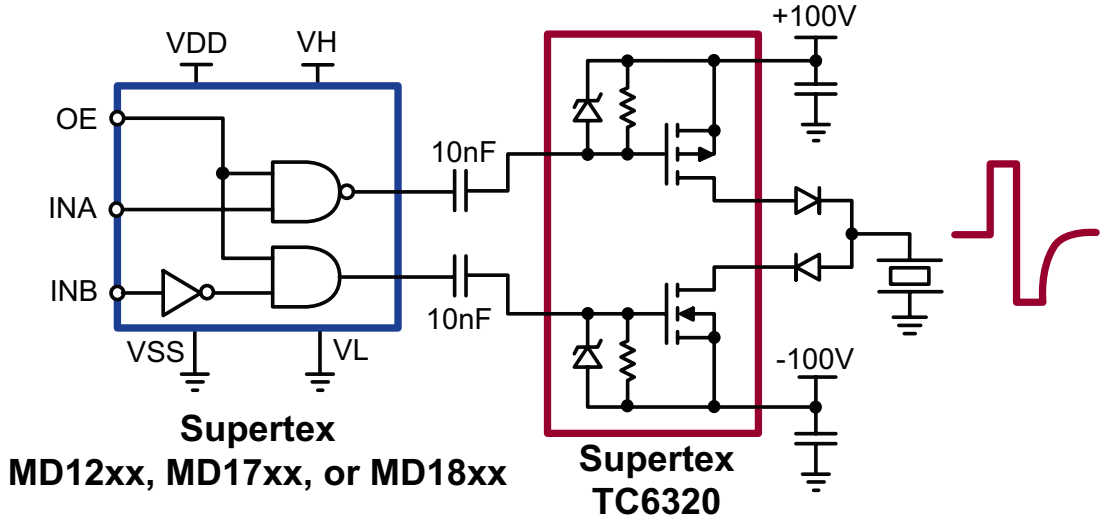
- ▶ High voltage pulsers
- ▶ Amplifiers
- ▶ Buffers
- ▶ Piezoelectric transducer drivers
- ▶ General purpose line drivers
- ▶ Logic level interfaces



8-Lead DFN (K6)



8-Lead SOIC (TG)



Typical Application Circuit

Product Overview:

The TC6320 is a complementary high speed, high voltage, gate clamped, N- and P-channel MOSFET pair in a single package. The TC6320 offers 200V breakdown voltage, 2.0A output peak current and low input capacitance. The 2.0A output current capability will minimize rise and fall times. The low input capacitance will minimize propagation delay times and also rise and fall times. The MOSFETs have integrated gate-source resistors and gate-source Zener diode clamps that are desired for high voltage pulser applications, saving board space and improving performance. It is specifically designed for applications in medical ultrasound transmitters, and non-destructive evaluation in materials flaw detection, but it can also be used as an efficient buffer.

Supertex's vertical DMOS FETs are ideally suited to a wide range of switching and amplifying applications where very low threshold voltage, high breakdown voltage, high input impedance, low input capacitance, and fast switching speeds are desired.

Features:	Benefits:
200V drain-to-source breakdown voltage	Common voltage range for medical ultrasound
Integrated resistors and Zener diodes	Reduces board space and brings down cost
2.0A $I_{D(ON)}$	Enough current to drive transducers with rise and fall times of 20ns for proper imaging
Low input capacitance	Eases gate drive requirement to meet desired output speed
8-Lead DFN and SOIC packages	Simplifies PCB assembly



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Supertex inc.

N- and P-Channel Enhancement-Mode MOSFET Pair

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
TC6320K6-G	8-Lead DFN 4.00x4.00mm body 1.00mm height 1.00mm pitch (dual pad)	NOW	4-5 Weeks ARO
TC6320TG-G	8-Lead SOIC 4.90x3.90mm body 1.75mm height (max) 1.27mm pitch	NOW	4-5 Weeks ARO

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



Product Contact

For any questions regarding the TC6320 please contact your local area Supertex sales office, or contact the main office in the US at:

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