

### FEATURES

- Integrated gate driver and N channel MOSFET
- Architecture enables fast optical rise and fall times: <math><1\text{ ns}</math>
- Driver supply voltage range: 4.5 V to 5.5 V
- Anode supply voltage range: 5 V to 8 V
- Package: 2.040 mm  $\times$  1.615 mm, 12-ball WLCSP
- Rated from  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  ambient temperature

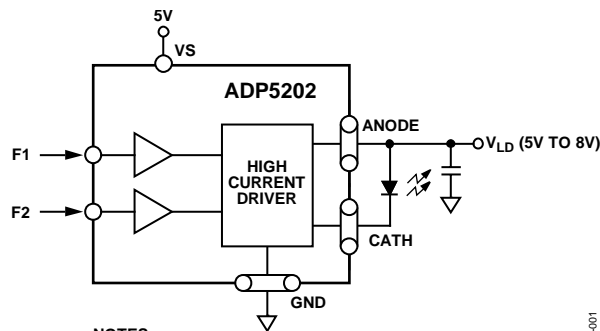
### APPLICATIONS

Time of flight cameras

### GENERAL DESCRIPTION

The ADP5202 is a single channel, laser diode driver with an integrated, N channel, metal-oxide semiconductor field effect transistor (MOSFET). The driver is able to sink current at 20 A/ns, resulting in a subnanosecond, optical rising edge when used together with most laser diodes targeting time of flight applications. The fast rising edge makes the laser diode possible to deliver high optical power within several nanoseconds.

### FUNCTIONAL BLOCK DIAGRAM



NOTES  
1.  $V_{LD}$  IS THE LASER DIODE VOLTAGE.

Figure 1.

21356-001

For more information about the [ADP5202](#), contact Analog Devices, Inc., at [afe.ccd@analog.com](mailto:afe.ccd@analog.com).

Rev. Sp0

[Document Feedback](#)

Information furnished by Analog Devices is believed to be accurate and reliable. However, no responsibility is assumed by Analog Devices for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Specifications subject to change without notice. No license is granted by implication or otherwise under any patent or patent rights of Analog Devices. Trademarks and registered trademarks are the property of their respective owners.

One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A.  
Tel: 781.329.4700 ©2020 Analog Devices, Inc. All rights reserved.  
[Technical Support](#) [www.analog.com](http://www.analog.com)

**NOTES**