
CT1271
CT1281

CT Micro's New Photovoltaic Driver Optocoupler Offers An Isolated MOSFET Driver without Need for an External Power Line.

As part of the extension to CT Micro's Photo-MOSFET solid-state relay family, we are now offering a Photovoltaic Driver Optocoupler device which offers driver function alone without the output MOSFET. A lot of the time, a designer who is looking for an isolated solution for their design might run into difficulty in finding the desired Photo-MOSFET parameters like Off state output voltage (V_{OFF}), On-state current (I_{ON}) or ON-state Resistance (R_{ON}). Afterall, the selection that the market has is relatively limited as compared to the wide selection of the discrete MOSFET offerings. The good news is we are offering both **CT1271** and **CT1281** just for this reason. Please refer to Fig. 1 for the recommended application circuit. Another advantage of this type of isolated driver is that an external power supply is not needed to power the device as the voltage needed to drive the external MOSFET is entirely self-generated by the light-to-current conversion process. The current derived here is then directly converted to voltage with its internal photo diodes array.

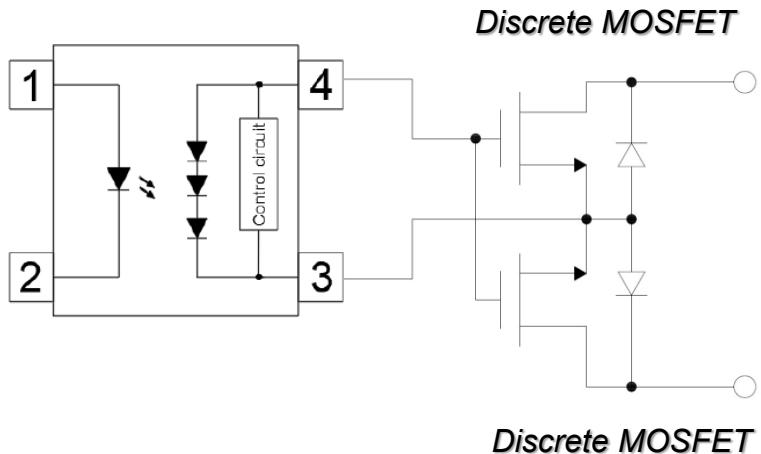
Here are some of the main features:

- **Open circuit Voltage (Voc): CT1271-8V; CT1281-16V**
- **Short circuit Current (Isc): CT1271-15uA; CT1281-16uA**
- **High operating temperature: CT1271-100°C; CT1281-125°C**
- **High Isolation Voltage: 3750 VRMS/min**
- **Compact package dimension with a SOP4 package outline**
- **External Creepage distance $\geq 5\text{mm}$**

Typical Applications:

- Isolated Solid States Relays
- Isolated Pre-Charge Circuit Control

Fig 1. Recommended application circuit with external discrete MOSFET



Availability: Please contact your nearest CT Micro Sales or Sales representative.

Delivery: ~12 to 16 weeks, ARO.

About CT Micro International Corporation

CT Micro International Corporation, a Customer Oriented and Technology Driven company. CT Micro was formed with the focus on delivering cutting-edge technology and built that right into our products and solutions which can then be implemented by the most demanding applications from our global customers. CT Micro is managed by a team of highly skilled and technically sound professionals who is dedicated to the design, marketing and sales of Optoelectronics and Discrete MOSFET products. All top management and technical team members have more than 15 years of products knowledge and thus can help realize any design right from component selection up to actual finished product implementation with minimum effort and time. Among some of the end market applications segment served are Consumer Electronics, Industrial & Home Appliances. Knowing that any best applications and products you make would require matching top notch quality components, CT Micro implements some of the most stringent design requirements on all of our new products as well as world class quality control during our manufacturing process. To us, creating a reliable and efficient product is just a way we show our responsibility to our clients, society and the world.

For more information, please go to: <http://www.ct-micro.com>.

Written by: Chai, KW-(Global Marketing & Sales)- Rev 1.0, 08/08/2024