DC Solid State Relay - 30V 50A



The 3950 DC Solid State Relay can be used to switch loads of up to 50A at 30VDC using the digital output from a 1012 - PhidgetInterfaceKit 0/16/16. The Relay comes with an optional protective cover to protect people from touching the exposed high power wires, and a diode to protect your SSR from harmful transients. All wires connect to this relay by screw terminals. If you are switching a high power load or find the relay is getting hot, please consider a heat sink. You can see a list of available heatsinks in the compatible products tab.

Comes Packaged with





- A Protective Relay Cover
- A Heat Transfer Pad
- A Diode

Warnings

- 1. When choosing a SSR, check the actual load current and the working ambient temperature. Refer
- to the characteristic curve in the Data Sheet and select the proper heat sink if required. 2. Use the heat transfer pad between the SSR and the heat sink. Failure to do so can cause
- overheating and could damage the relay. 3. Make sure that the SSR terminal screws are tight. If the screws are not tight, the SSR will get damaged by heat generated when the power is ON. Check the Data Sheet for recommended
- tightened torque. 4. When an SSR fails, it most often fails permanently closed — leaving your load powered, and possibly creating a fire or safety hazard.
- 5. You can use a fuse to protect your circuit from wiring mistakes and accidental short-
- 6. Make sure that you use the relay within the product specifications.





Product Specifications

Board

Controlled By Digital Output (5V)

Electrical Properties

Relay Output Type MOSFET

Isolation Method Photoelectric

Dielectric Strength 2.5 kV AC

Control Voltage Min 4 V DC
Control Voltage Max 32 V DC
Load Voltage Max (DC) 30 V DC

Load Current Min 20 mA
Load Current Max (DC) 50 A
Load Surge Current 120 A
Turn-on Time Max 1 ms

Physical Properties

Turn-off Time Max

Length 58 mm
Width 45 mm
Height 25 mm
Operating Temperature Min -30 B°C
Operating Temperature Max 80 B°C

Other Properties

Manufacturer Part Number KS33/D-30D50-L

Have a look at the <u>Data Sheet</u> for a complete set of specifications.

0.5 ms