# DC Solid State Relay - 30V 100A



## **Product Description**

• placed by the <u>3958</u>, an SSR with similar characteristics.

The 3952 DC Solid State Relay can be used to switch loads of up to 100A 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. Heat sinks 3955 and 3961 are designed for use with this relay.

#### Comes Packaged with

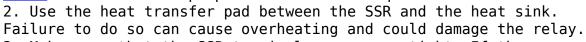




- A Protective Relay Cover
- A Heat Transfer Pad
- A Diode

## 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.



- 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 <u>Data Sheet</u> 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 <u>fuse</u> to protect your circuit from wiring mistakes and accidental short-circuits.
- 6. Make sure that you use the relay within the product specifications.

## **Product Specifications**

#### **Electrical Properties**

Relay Output Type I	MOSFET
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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) 100 A Load Surge Current 240 A Turn-on Time Max 1 ms Turn-off Time Max  $0.5 \, \text{ms}$ 

### Physical Properties

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-30D100-L

Have a look at the Data Sheet for a complete set of specifications.