

# DC Solid State Relay – 30V 100A



## Product Description

- placed by the [3958](#), 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.
2. Use the heat transfer pad between the SSR and the heat sink.
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-circuits.
6. Make sure that you use the relay within the product specifications.



## Product Specifications

### 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) | 100 A         |
| Load Surge Current    | 240 A         |
| Turn-on Time Max      | 1 ms          |
| Turn-off Time Max     | 0.5 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.

