

DC Solid State Relay – 120V 25A



If you need to switch DC power, this solid state relay is the perfect mix of quality and affordability. Using the digital outputs from a Phidgets device, you can control the relay to silently switch a DC circuit at 120V/25A or less. There's an indicator LED on the control side of the circuit so you can tell the state of the relay at a glance.

If your SSR is overheating, you should consider getting a heat sink for safety. See the "Compatible Products" tab for a list of compatible heatsinks. This SSR comes with a heat transfer pad that can be placed between the metal base of the SSR and the surface it's mounted to in order to help encourage heat flow. It also comes with a diode that can be used to protect your SSR against back EMF.

Comes Packaged with



This relay comes packaged with a heat transfer pad and a 10A02-T diode. Use the heat transfer pad

whenever mounting the SSR on a heat sink or metal surface. Use the diode in parallel with your load in order to protect your SSR. For more information,

see the [Solid State Relay Primer](#).

Connection

This relay can be controlled using a Phidgets relay output board. See the “Compatible Products” tab for details.



Warnings

1. If you're running the SSR close to it's maximum current rating, you'll probably need to mount it to a heat sink or a surface that can function as a heat sink.
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.
4. When an SSR fails, it most often fails permanently closed – leaving your load powered, and possibly creating a fire or safety hazard. Be sure to have failsafes in these situations.
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.
7. Ensure that the relay terminals are covered or protected when switching high voltage loads.

Product Specifications

Electrical Properties

Isolation Method	Photoelectric
Dielectric Strength	2.5 kV AC
Control Voltage Min	3 V DC
Control Voltage Max	32 V DC
Load Voltage Min (DC)	5 V DC
Load Voltage Max (DC)	120 V DC
Load Current Max (DC)	25 A
Load Surge Current	100 A
Turn-on Time Max	2 ms

Turn-off Time Max 2 ms

Physical Properties

Length 57 mm

Width 43 mm

Height 25 mm

Operating Temperature Min -20 °C

Operating Temperature Max 80 °C

Other Properties

Manufacturer Part Number KG1025D