



Power Input
Voltage: 5 to 24V DC

TPS25927ONRGE

Power Output
Voltage = Input
Current: up to 7.5A



This AC-DC power supply is prepared by users themselves, so we have limited control of this power source. We can only specify the input voltage range.

PGOOD Indicator



IMON Voltage

Power output to load (LED string), actual load current depends on several factors:

1. The number of lights in the LED string.
2. Type of LED string.
3. Working pattern (brightness/color) of LED.

Design Consideration/Expectation

1. TPS25927ONRGE (device) is used to replace a conventional fuse with additional self-recovery function.
2. Some important settings of the device are:
 - ILIM = 7.5A
 - RETRY_DLY = 5 to 10 seconds (still TBD)
 - NRETRY = indefinitely
3. Here are some scenarios, under which the device is expected to cut off immediately with PGOOD indicator "OFF" so the user will know there is an overload condition at the output.
 - In normal working condition, when the load current is above 7.5A due to what ever reason.
 - When the device restart from a fault condition. If the device works in current limit mode at this time with a soft overload condition (8.5A for example), parts (not all) of the lights on LED string will be turned on and they could work in an abnormal status (brightness/color is incorrect). This can potentially confuse the user, so it is expected to cut off power output thoroughly.
 - When users power on the device for the first time with soft overload conditions (8.5A for example) connected to the output port. The same consideration as when the device restart from fault. It is expected the output is cut off thoroughly until overload condition is removed.