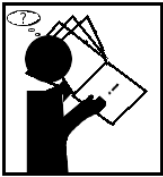


**IMPORTANT:
Read Before Using**



Operating/Safety/User Instructions

*Failure to Comply with this manual
can result in loss of property and life*

**SD26 SuperDiode
Advanced Solar Diode Block**

Absolute Maximum Ratings:

Solar Cell open circuit voltage
must be less than 28.0 V

Maximum 15 Amp/Cell

Less than 30 Amps Total Current

System Requirements:

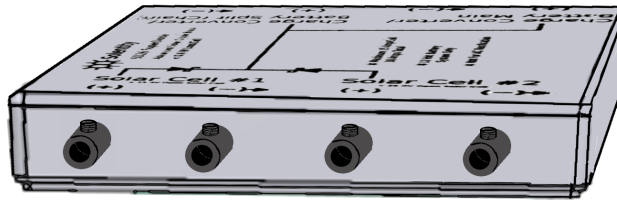
12 Volt Battery Systems Only
(10.0V – 14.8 V)

Not for AC Rectification

Fusing Before Module Required
(15 Amps/Cell)

Water Free Environment necessary
with no liquid condensate.

Device cannot be covered and 6
AWG or smaller AWG (larger
diameter) must be used to
terminals.



Product Specifications:

Quiescent Bias Current - Battery Loss No Solar Power Present	@ Voltage battery equal 12 V < 2 mA/ Cell (.025 W/Cell)
Solar Power Present Control Circuitry Power Consumed	0.7 W Loss/Cell @ Battery voltage equal 12.0V
Insertion (Power) Loss Between Solar Cell and Battery per cell	Less than 0.4 W Loss @ 10 Amps/Cell
Insertion (Power) Loss Between Solar Cell and Battery per cell	Less than 0.15 W Loss @ 5 Amps/Cell
Response Time for forward to reverse and reverse to forward diode bias	Less than 10 ms
Operating Ambient Temperature	-26C to 50C (-15F to 120 F)

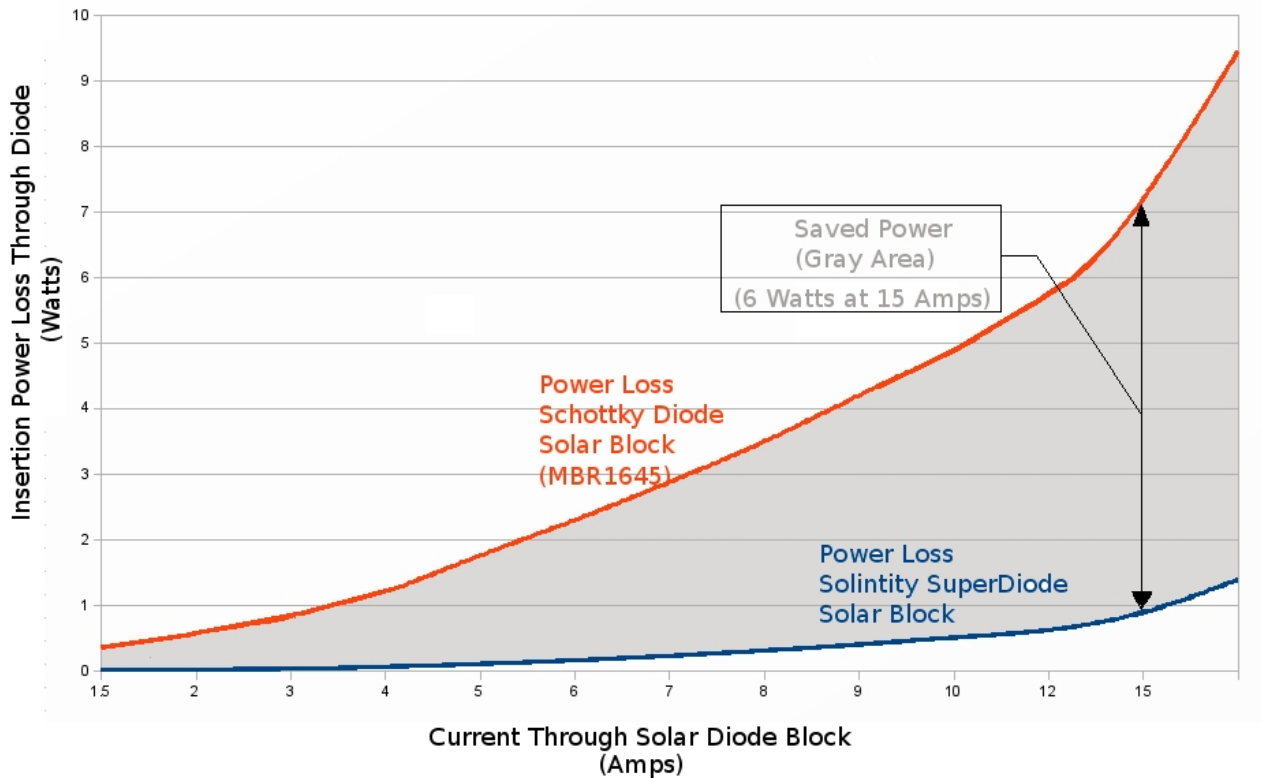


<http://www.solintity.com>

Product Features and Comparisons

The comparison chart below shows the difference of power loss of the SD26 against a typical high power Schottky (MBR1645) used for solar diode block applications. As can be seen up to 6W (at 15 Amps) of additional power can be saved using the SD26 versus a typical Schottky. Needless to say this makes the SD26 cool to the touch when operating under maximum specified load (15 Amp/Cell maximum – 30 Amp per SD26 module), without the need for active cooling such as fans, it also saves power from being consumed by the diode block that would otherwise be put to good electrical utilization.

Comparison Typical Shottky Versus Solintity SuperDiode SD26



The SD26 provides a mechanical fixture which can be used to quickly connect 6 AWG wire via set screws on each of its 8 connectors as shown below. This utility provides for stable and quick connections and mounting (safety consideration on next pages must be followed) when the SD26 is utilized as your solar cell solar block diode.

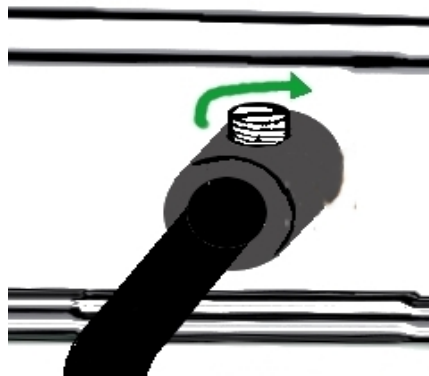
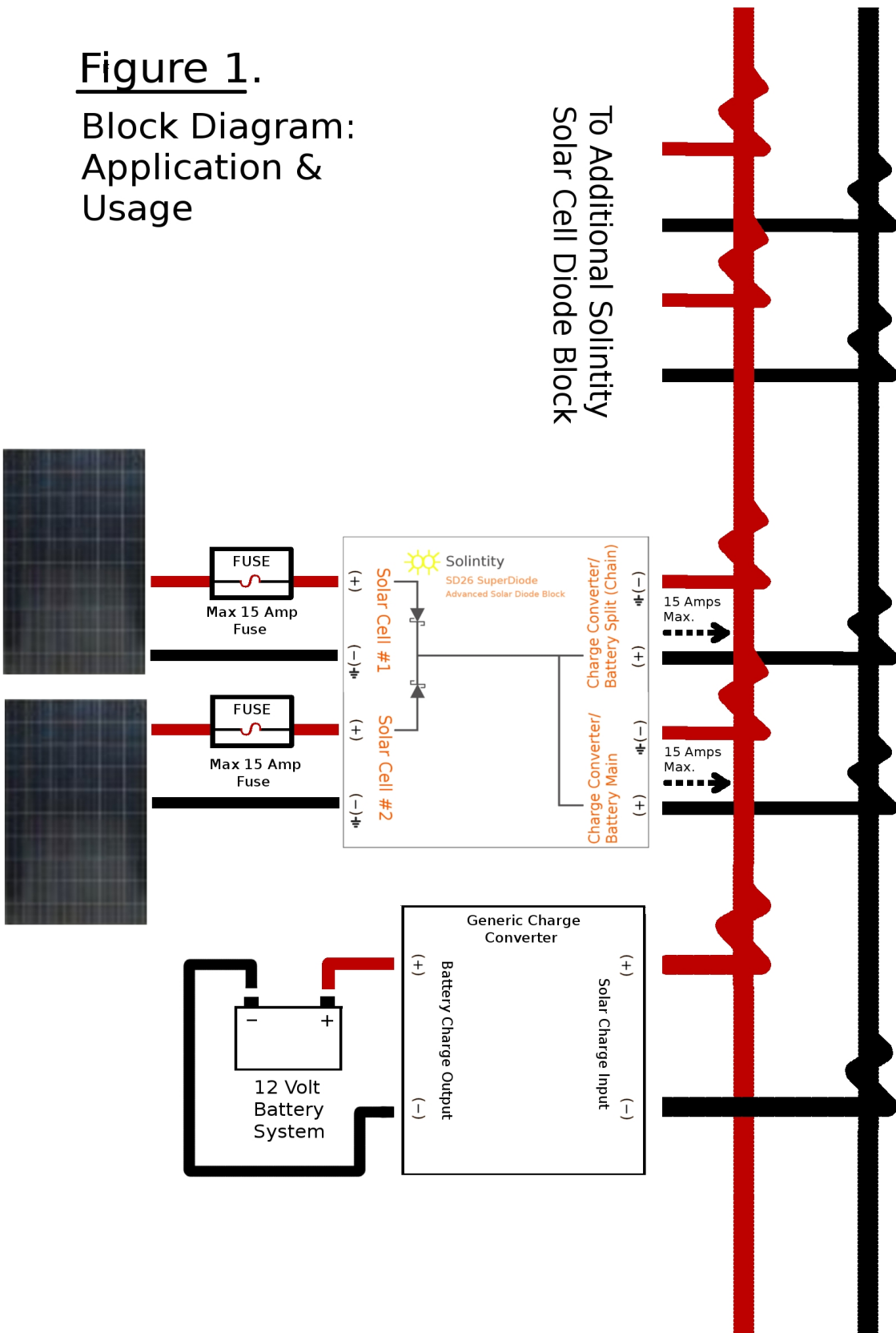


Figure 1.
Block Diagram:
Application &
Usage

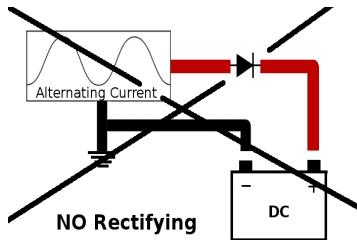




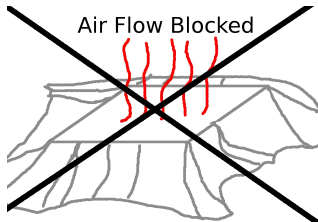
Shall Not Exceed:

15 Amps/Cell or 30 Amps Total/Box

Anything in excess of this can cause fire, destruction of property, injury, and/or fatalities.



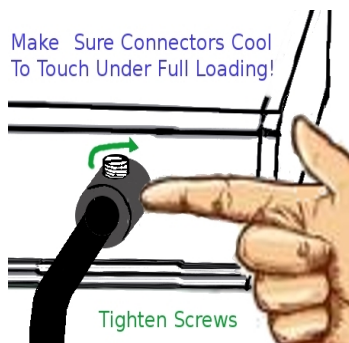
Not for AC to DC rectification. Under no circumstances is this device to be used for anything other than a solar block diode. It is not made as a rectifier of oscillating power 60 Hz or other.



Do not cover or prevent natural air flow to this device.



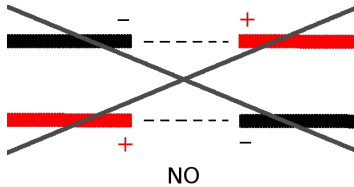
Keep away from flammable and combustible and volatile gases as the device may create small electrical arc that under right circumstances could cause ignition.



Tighten all connectors and periodically make sure (after new installation) that **connectors are cool to the touch** even while under full loading. A loose connection can create extra resistance that can create excessive heating, fire, property loss, and even loss of life therefore these connectors and fasteners should be **checked every 5 minutes for first 10 minutes, then 10 minute intervals up to 30 minutes** after first installation and **monthly thereafter** for excessive heat. **Use 6 AWG or large diameter wire only!**



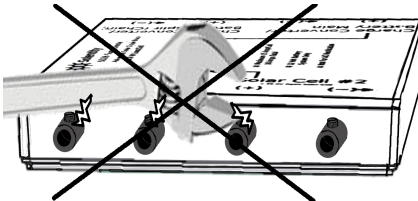
There is no fusing inside this module so therefore its the user's responsibility to provide 15 Amp fusing before this device and after solar cells! See previous page diagram to see proper placement in solar cell circuitry.



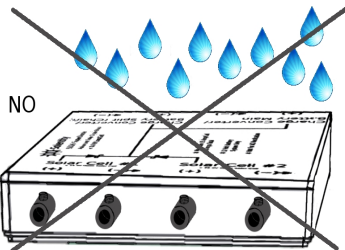
This device is **not protected against reverse polarity** connection, warranty is void if polarity is reversed.



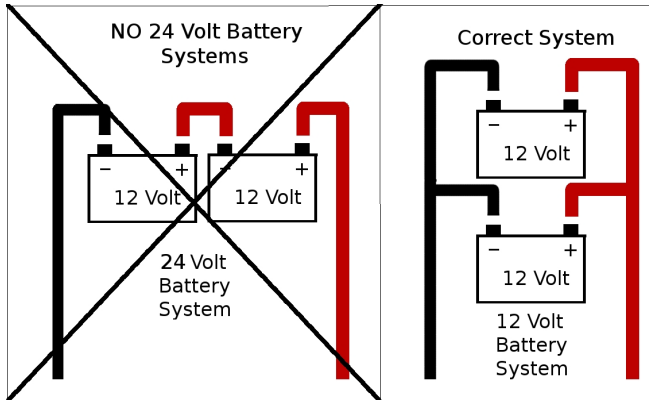
Item must be serviced and cleaned in four years. Service manual download is offered free of charge, on how to clean and re-calibrate an aged diode. Without proper cleaning the heat exchanging may be reduced due to natural thermal insulating dust in normal environments, causing higher temperatures and the device to fall out of the stated specifications. It is a must that any unit appearing hot to the touch be replaced immediately to avoid injury or personal property damage.



To avoid shorting this device must have all connectors and wires isolated from conducting surfaces. It is recommended that the device be mounted inside a fixture that prevents unit movement to conducting surface or vice versa. This fixture must not prevent proper ventilation to the device however.



This device is not weatherproof and must not be used in high moisture environments or exposed to liquid water of any form.



Device shall not be operated without 12V battery in system, damage to device may be done by operating without battery for extended time while solar cells are present. Correct order is to always connect battery or charge controller before applying solar cells. Also this is **for 12V battery systems only** as stated in specifications.



All federal codes and local electrical and building codes must be used with this device and wherever these laws apply this device must be used in conformance. Neither do we assume the legality of following all regulations or correct installation or responsibility of property damage that may be caused from using this device out of conformance of laws in your jurisdiction or nation.