

OSSM Board – High Voltage Failure

This issue affects Rev 2 orders with order number #1214 or lower. Anything after that has this fix applied to it.

Problem:

If you plug in the board using a 30V or higher supply **without** a motor connected, there is a very short voltage spike (1 us – about a millionth of a second) that kills the DC-DC converter.

Note - This does not occur if you are using standard 24V or if you have a motor connected to the board.



Solution:

Add a TVS (transient voltage suppression) diode. This clamps the input spike to a voltage that the DC-DC converter can tolerate.

Part number:

[1.5KE51CA](#) – This part is about \$1, and widely available.

You can add the diode by bending the leads and soldering to the board as shown below. We recommend trimming the pin marked to make sure it isn't too close to the diode lead.

