**Reg. No. 21BCE1297 Name: Vidhi Shah Date of Practical: 28/05/22**

**Experiment 10**

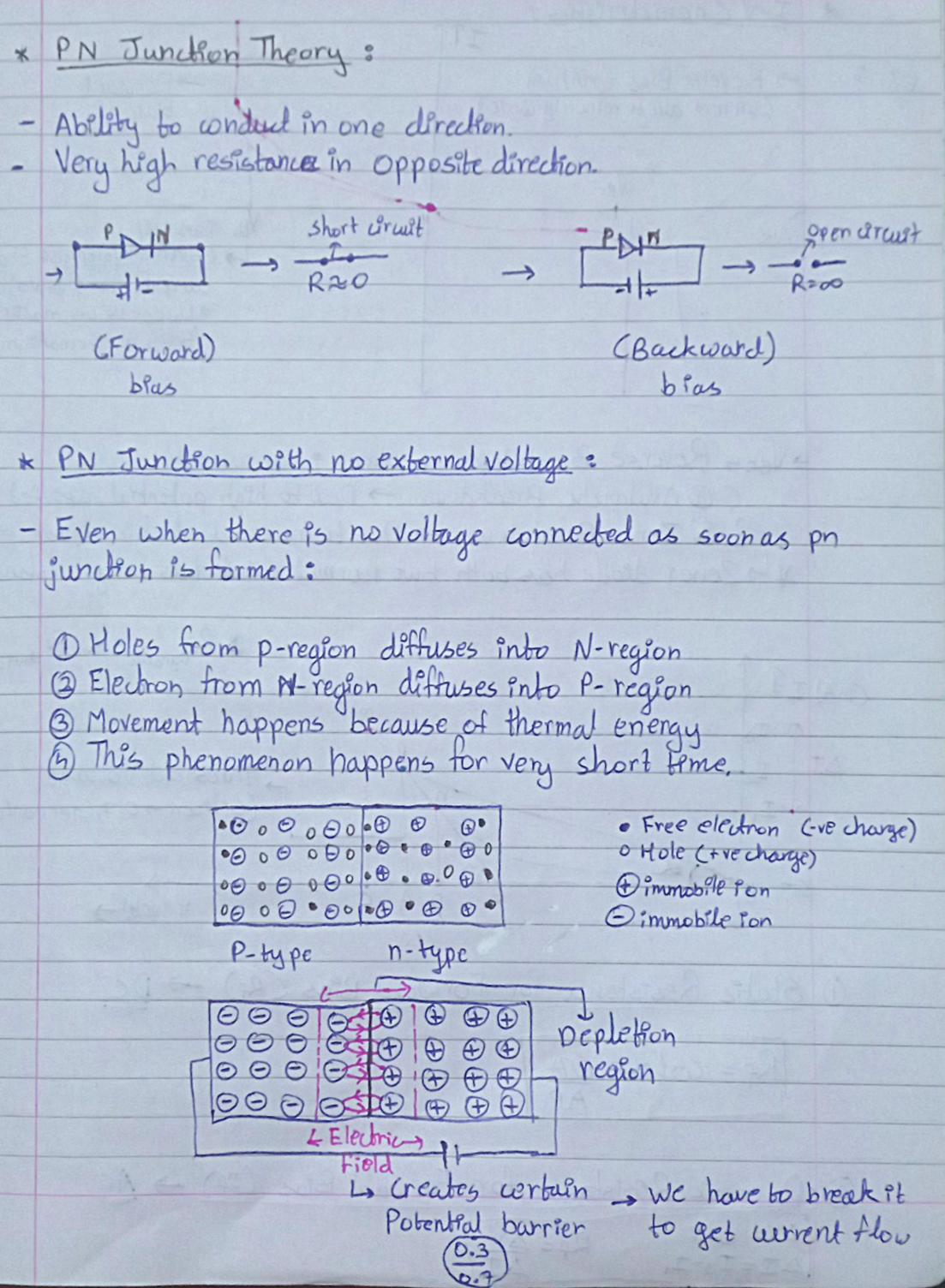
**Aim:**

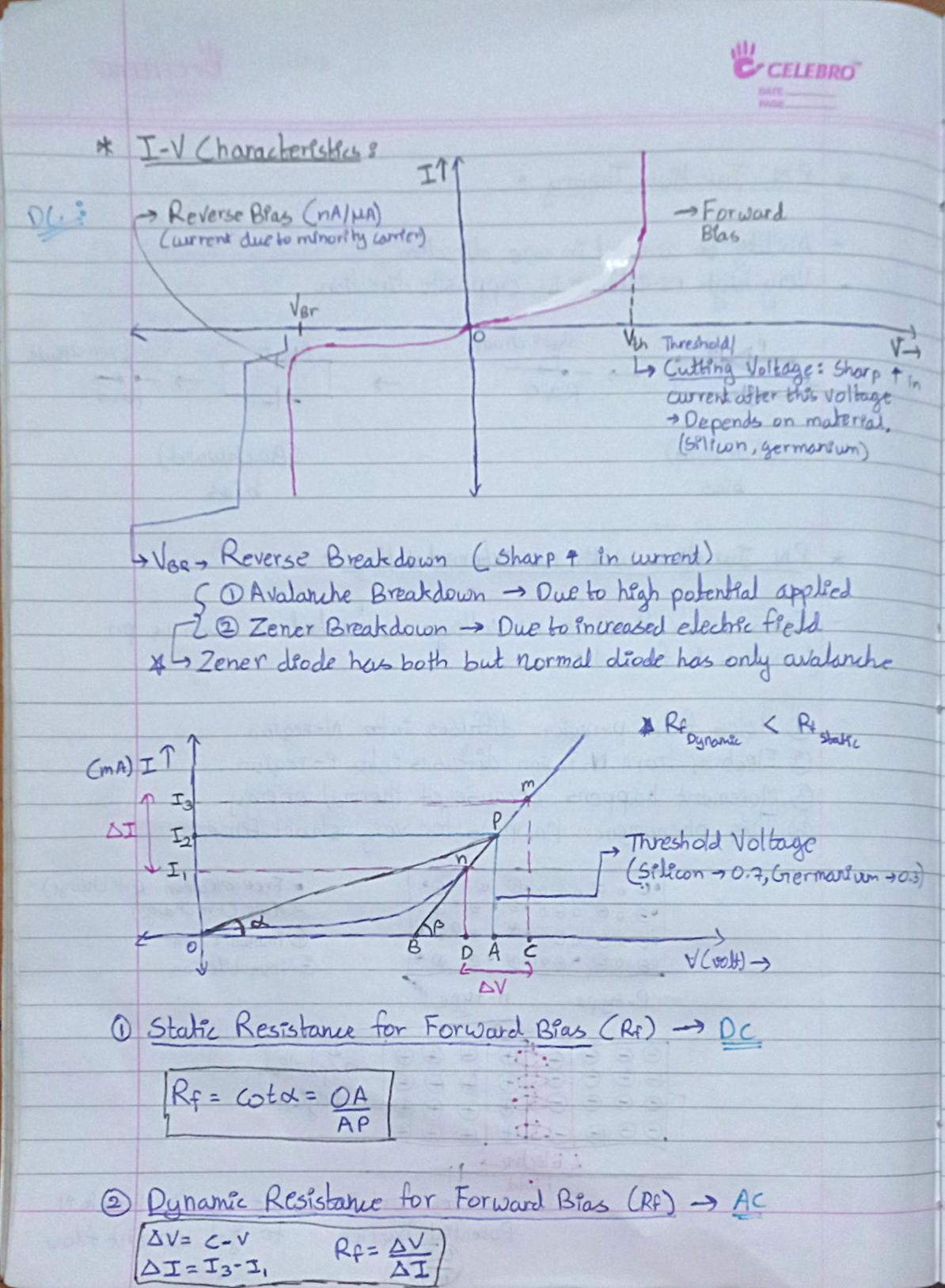
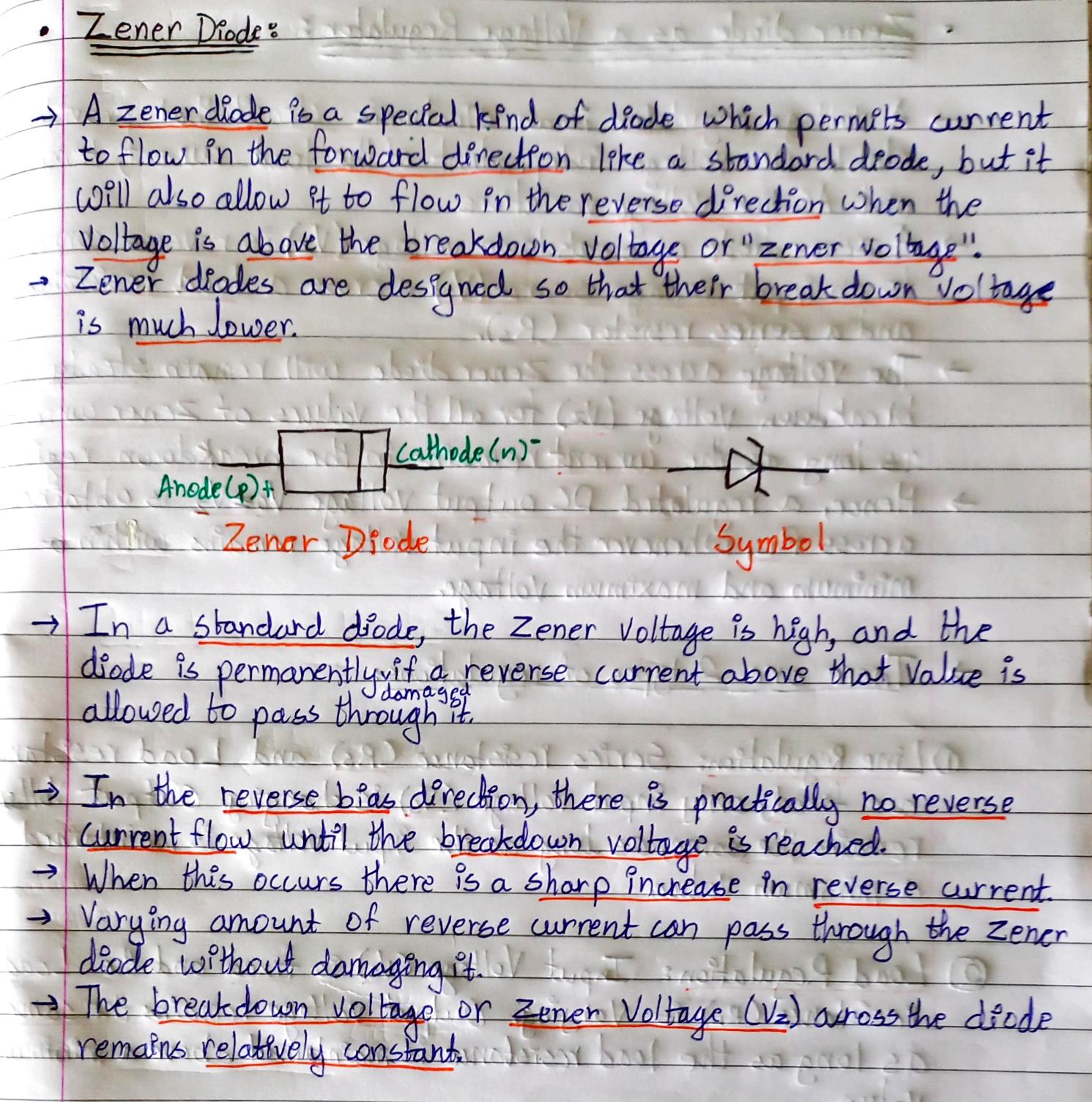
Draw I-V characteristics graph for PN Junction diode and Zener Diode

**Tools and Apparatus:**

­LTSpice, PN junction diode, Zener diode, Resistor, Voltmeter, Ammeter, Voltage Source

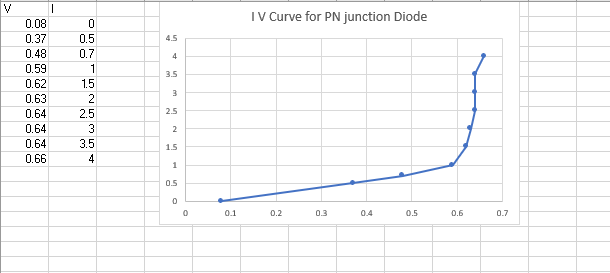
**Theory and Design:**



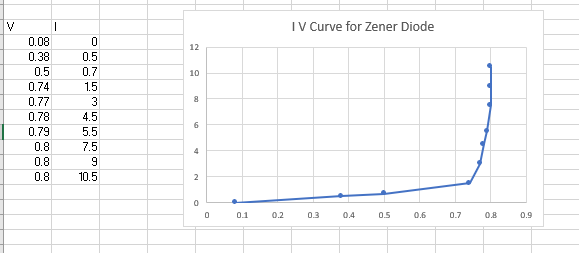
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**Hardware Simulation Results:**

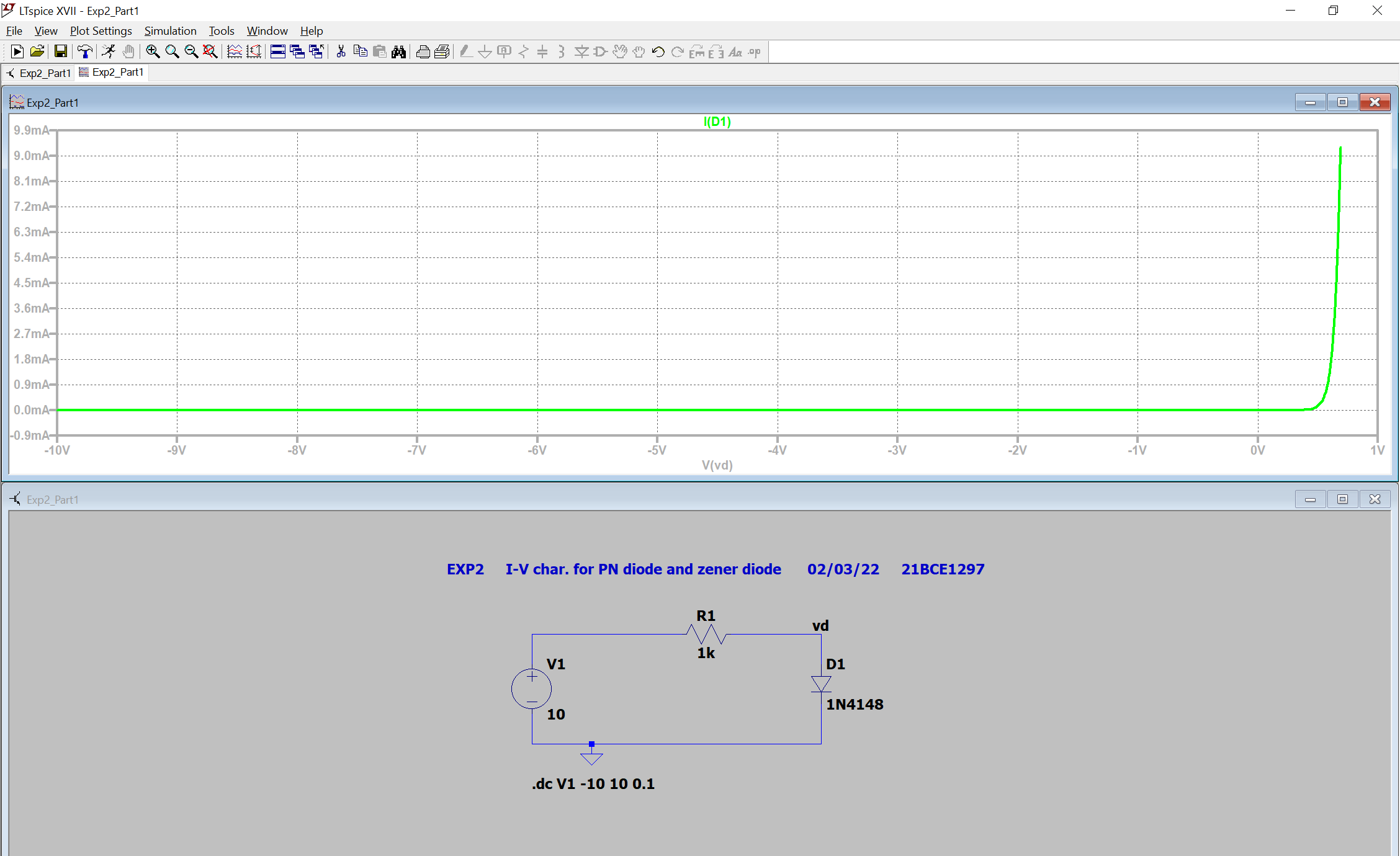
1) PN Junction



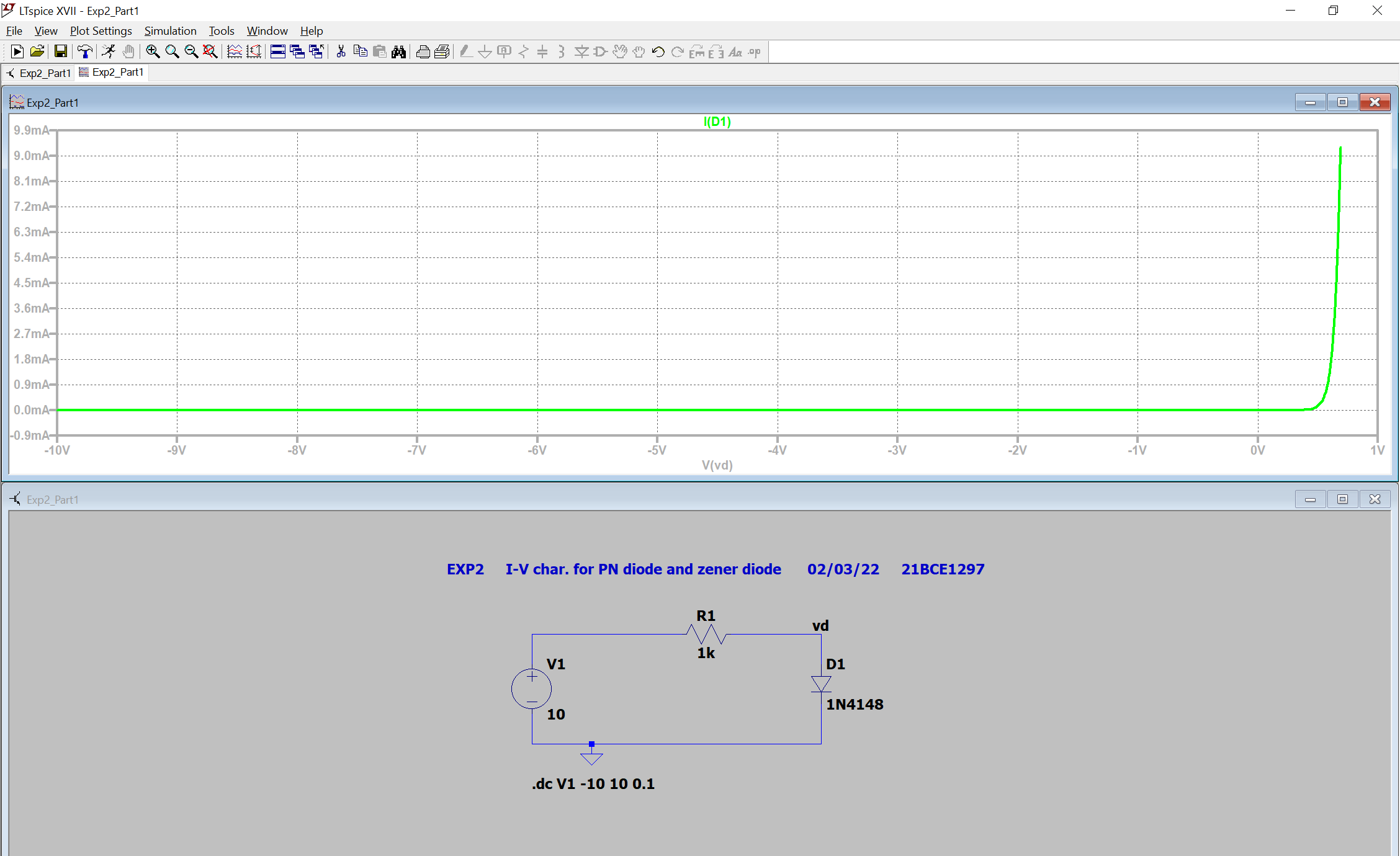
2) Zener Diode

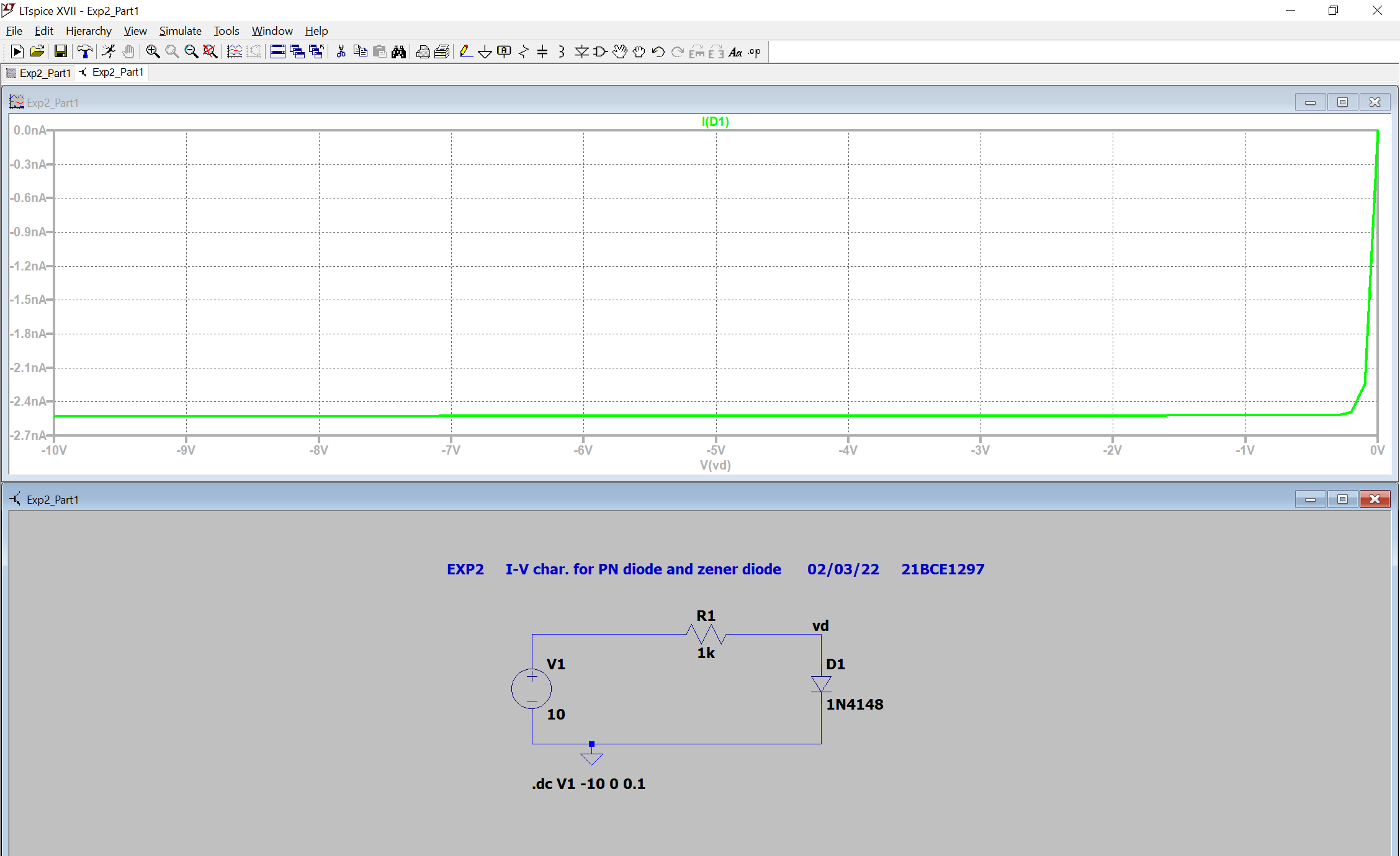


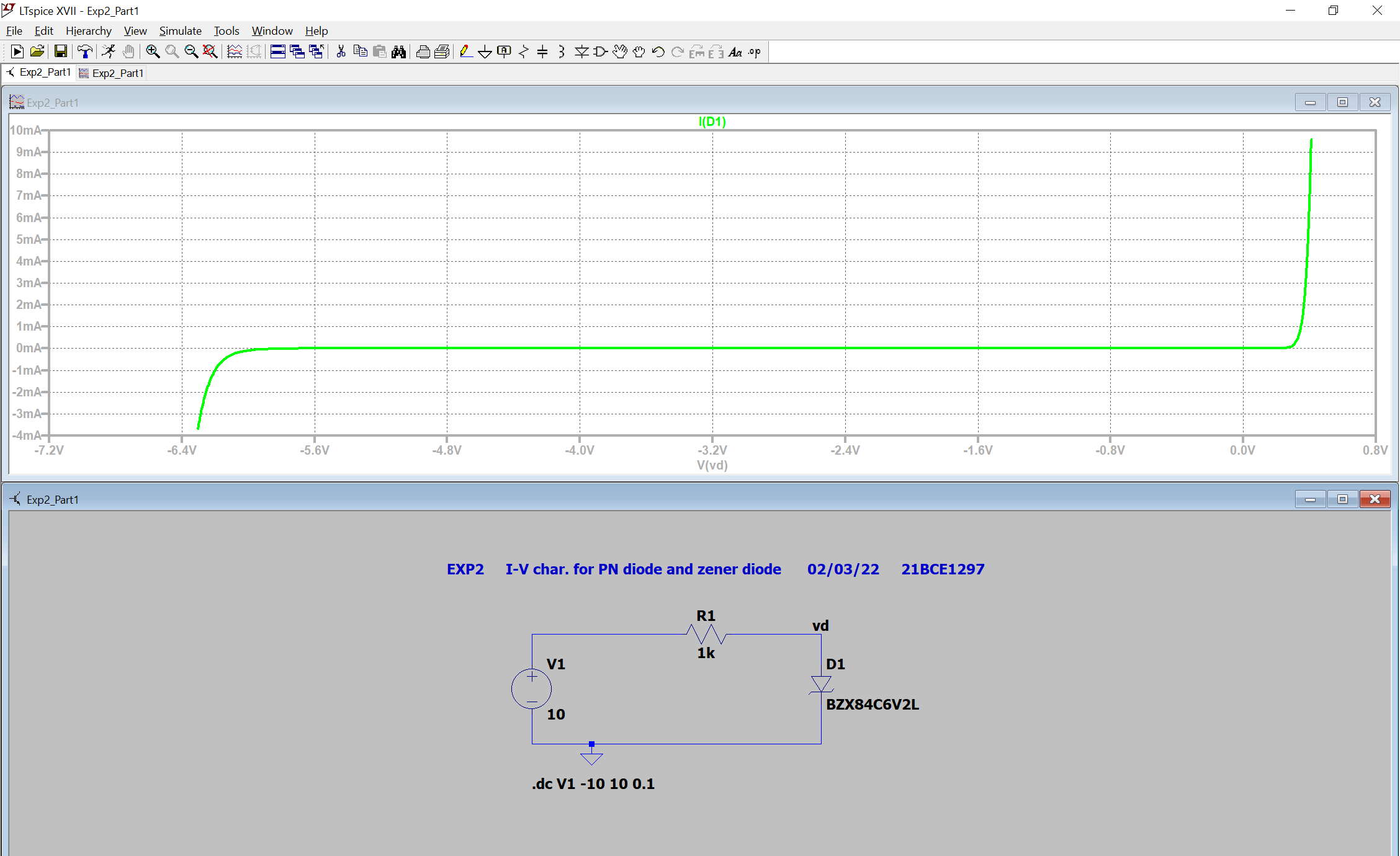
Circuit Diagram:

****

**Software Simulation Results:**

****1) Forward Bias

****2) Reverse Bias

****3) Zener Diode

**Conclusion:**

I-V Characteristics curve of PN Junction diode and Zener diode is verified.

**Inferences:**

1. Threshold voltage and breakdown voltage for Zener diode and PN junction diode is clearly visible.
2. Connect all wires properly and tightly.
3. Label vd properly