

UM-SJTU JI Summer 2019 VE 320 Quiz 7

Name:

Student ID:

1. How to experimentally measure the contact resistance between a metal and a semiconductor? Please list at least 2 methods and explain.

2. The reverse-saturation currents of a pn junction and a Schottky diode are 10^{-14} A and 10^{-9} A, respectively. Determine the required forward-bias voltages in the pn junction diode and Schottky diode to produce a current of 100 μ A in each diode. Please provide the process of derivation.