

PC2232: Physics for Electrical Engineers

Tutorial 8 Answers

1. Probability of transmission = $\frac{8}{9}$
2. $L = 3.82 \times 10^{-10}$ m
3. $\frac{I_B}{I_A} \approx 1.1\%$
4. (a) $U = 1.5$ eV
(b) $E = 2.0$ eV
5. We need a negative bias on the tip that is larger than 3V
6. STM figure would look like

