The *npn* BJT in Cutoff
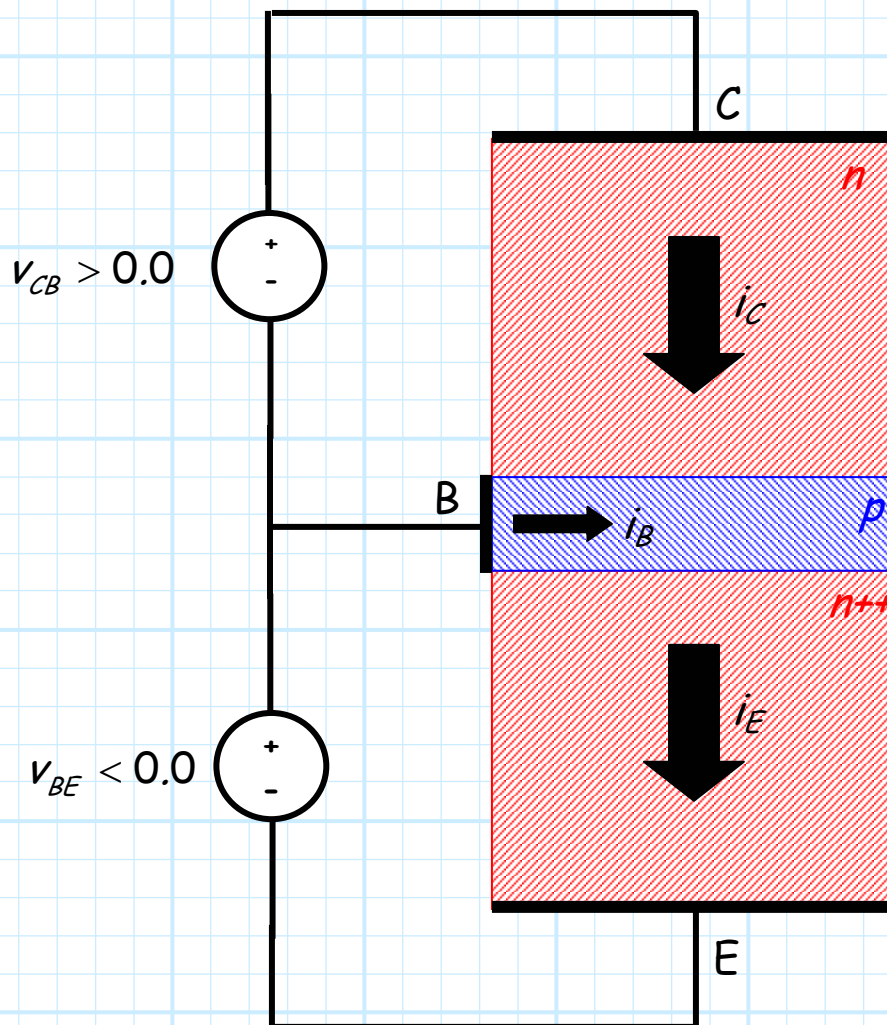
We know that for an *npn* BJT in **cutoff**, **both** the BEJ and CBJ will be **reverse biased**. In other words:

$$v_B - v_E \doteq v_{BE} < 0.0 \ V \quad \text{and} \quad v_C - v_B \doteq v_{CB} > 0.0 \ V$$

If both *p-n* junctions (CBJ and EBJ) are **reverse biased**, then **no current** will flow! I.E.:

$$i_B = i_C = i_E = 0.0 \text{ for a BJT in Cutoff}$$