

- $Beta = \frac{IC}{IB}$

- $Alpha = \frac{IC}{IE}$

- $IC = IB \times Beta$

- $IE = IB \times (Beta + 1)$

- $Alpha = \frac{IB \times Beta}{IB \times (Beta + 1)}$

- $Alpha = \frac{IB}{IB} \times \frac{Beta}{Beta + 1}$

- $Alpha = 1 \times \frac{Beta}{Beta + 1}$

- $Alpha = \frac{Beta}{Beta + 1}$