

$$i_{b2} = 0.004 \text{ ampere}$$

$$i_{e1} = -0.004 \text{ ampere}$$

$$i_{c2} = 0.096 \text{ ampere}$$

$$i_{b1} = 0.00008 \text{ ampere}$$

$$i_{c1} = 0.00392 \text{ ampere}$$

$$i_c = 0.09992 \text{ ampere}$$

$$i_c/i_b = 1249$$

$$i_c/i_e = -0.9992$$

$$v_{ce} = 12.0096 \text{ volt}$$