



script SPICE directive

slice=10n end=100u plots=PWM HIGHGate-UPhase LOWGate-Negative UPhase

$$I = 10\text{mA}$$

$$I = 0.7 / R$$

$$R = 0.7 / I$$

$$R = 0.7 / 10\text{mA}$$

$$R = 70$$

$$V = I \times R$$

$$V = 10\text{mA} \times 1\text{k}$$

$$V = 0.01 \times 1000$$

$$V = 10$$

$$I_{cmax} = 625\text{mA}$$

$$I_b = I_c / H_{fe}$$

$$I_b = 625\text{mA} / 200$$

$$I_b = 0.625 / 200$$

$$I_b = 0.003125$$

$$I_b = 3.13\text{mA}$$