

$$f=1/T$$

$$t(\text{on}) = t(\text{off}) = 0,7 * (R1+R2)[\text{Ohm}] * C1[\text{Farad}]$$

$$T = t(\text{on}) + t(\text{off}) = 2 * 0,7 * (R1+R2)[\text{Ohm}] * C1[\text{Farad}]$$

Einstellbereich:

$$T(\text{min})=2 * 0,7 * (1000+0) * 0,0000001$$

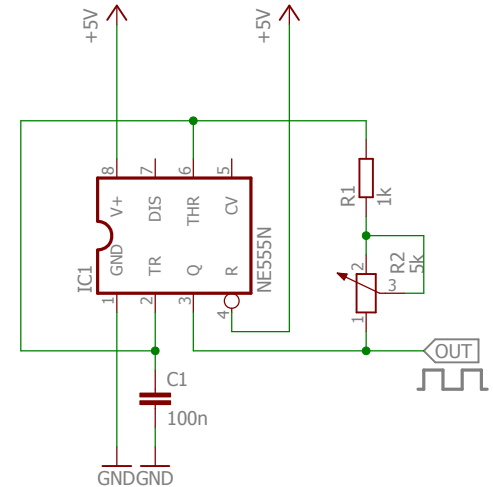
$$T(\text{min})=2 * 0,7 * 1000 * 0,0000001 = 0,00014\text{s} = 0,14\text{ms}$$

$$f = 1/0,00014 = 7143\text{Hz} = 7,143\text{kHz}$$

$$T(\text{max})=2 * 0,7 * (1000+5000) * 0,0000001$$

$$T(\text{max})=2 * 0,7 * 6000 * 0,0000001 = 0,00084\text{s} = 0,84\text{ms}$$

$$f = 1/0,00084 = 1190\text{Hz} = 1,19\text{kHz}$$



Impulsgeber_NE555

07.10.2016 21:59

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