

Tester (første rapport)

restart : with(Units[Standard]) :

$I_{led} := 5\text{mA} :$

$V_S := 5\text{V} :$

$V_R := 3\text{V} :$

$$R := \frac{V_R}{I_{led}} = 600 \, \Omega$$

Digital oscillator (første rapport)

restart : with(Units[Standard]) :

$C_1 := 100\text{nF} :$

$f := 256\text{Hz} :$

$$R_1 := \text{fsolve}\left(f = \frac{0.455}{R_1 \cdot C_1}, R_1\right) = 17.7734 \, \text{k}\Omega$$

$$Q_n := \text{fsolve}\left(1\text{Hz} = f \cdot \left(\frac{1}{2}\right)^x, x\right) = 8.000000000$$

$$R_{maks} := R_1 \cdot 1.1 = 19.55 \, \text{k}\Omega$$

Termodynamisk data

restart : with(Units[Standard]) :

$$\frac{1}{800\text{ms}}$$

1.25 Hz

(3.1)