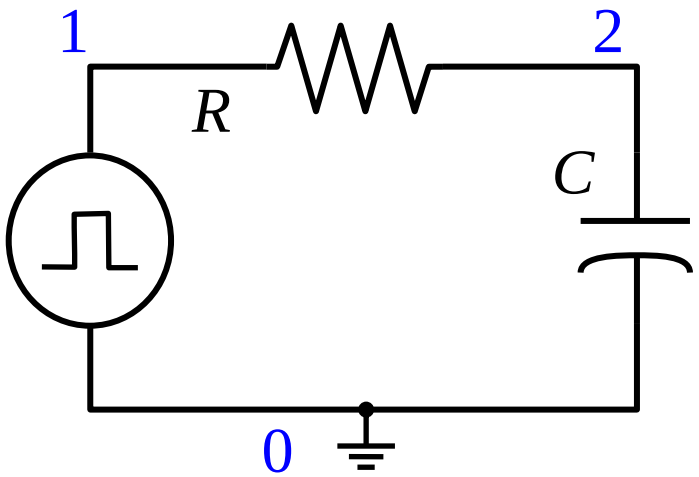
RC Circuit

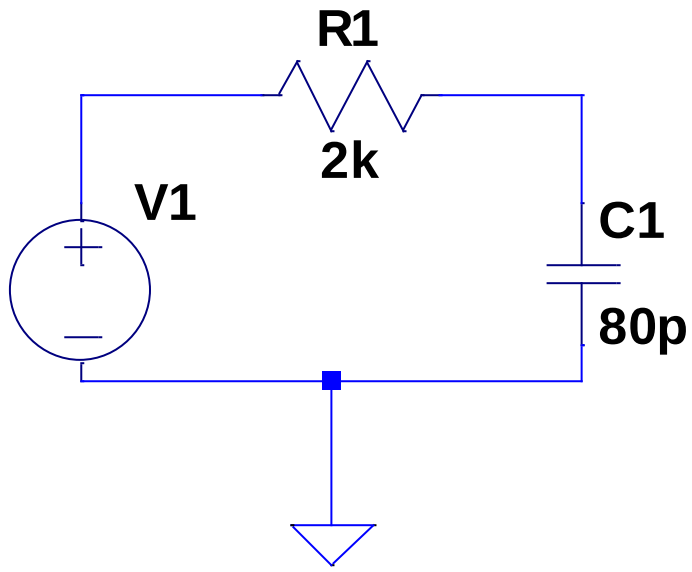


See Baker text fig 1.24

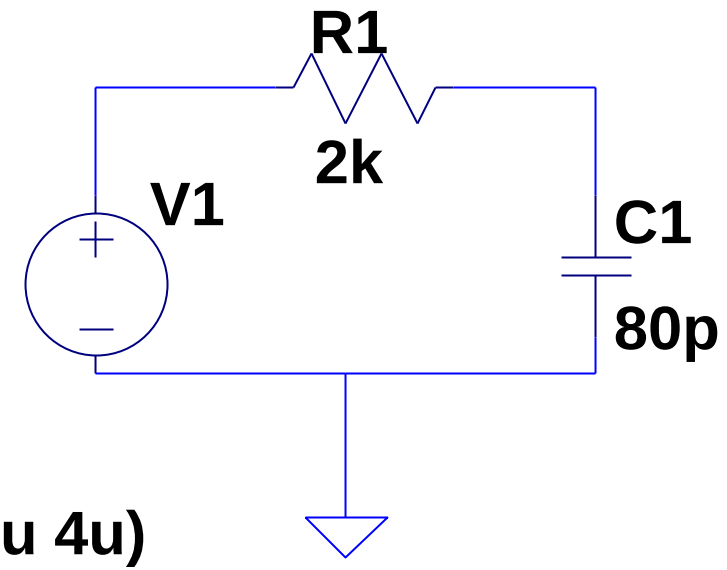
LTSPICE wmf file

.tran 10u

PULSE(0 5 1u 10n 10n 2u 4u)



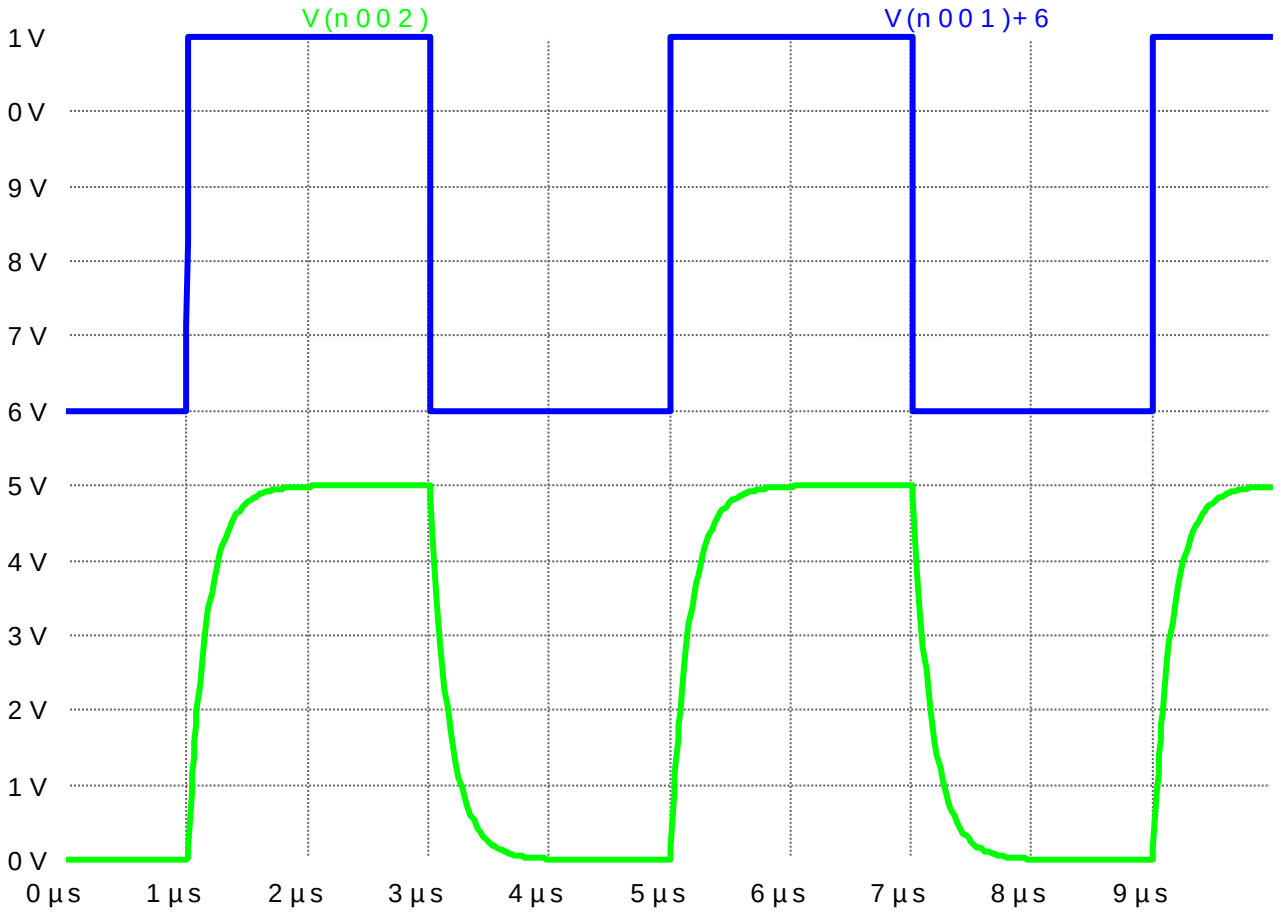
Wmf converted to drawing object



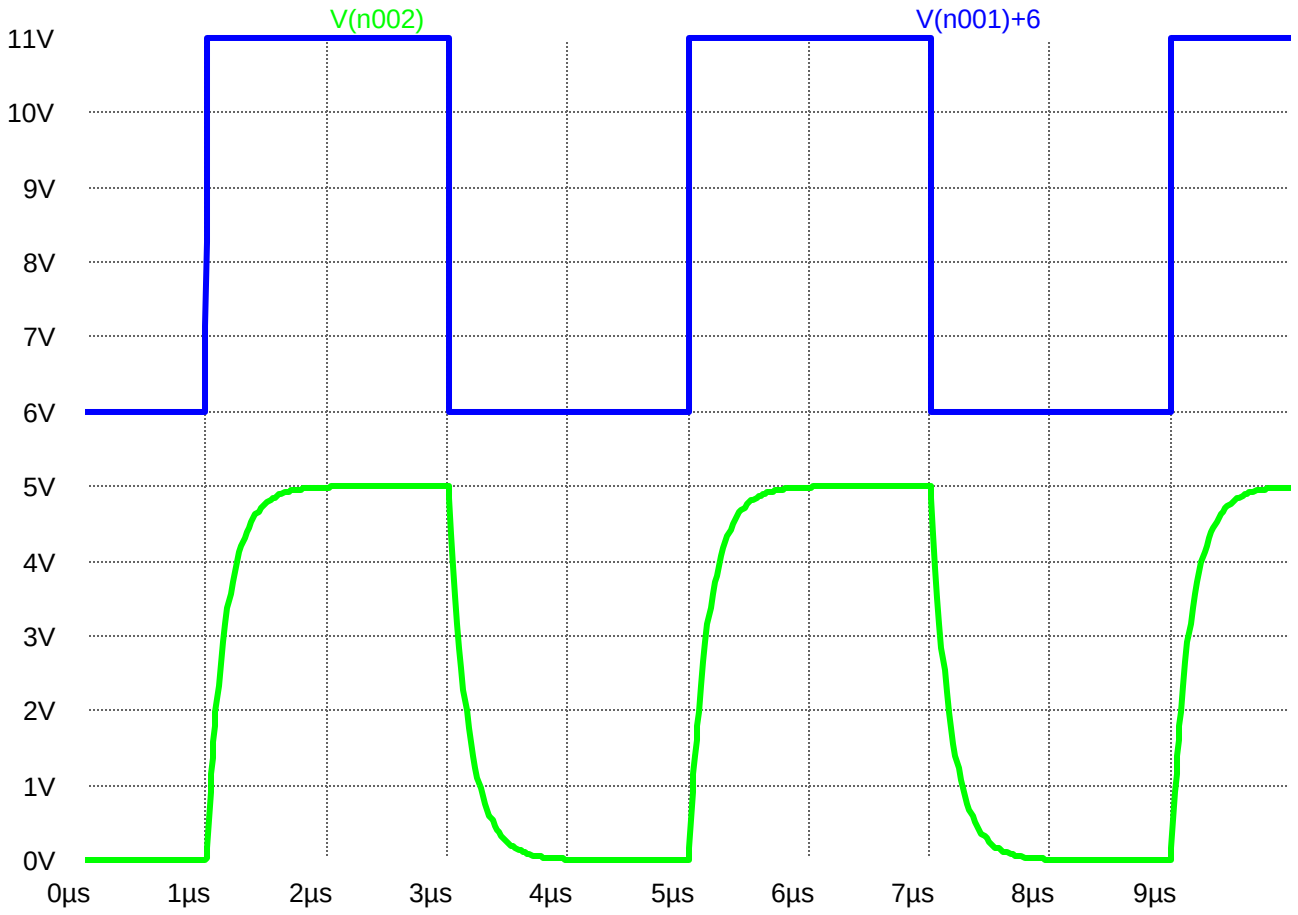
.tran 10u

PULSE(0 5 1u 10n 10n 2u 4u)

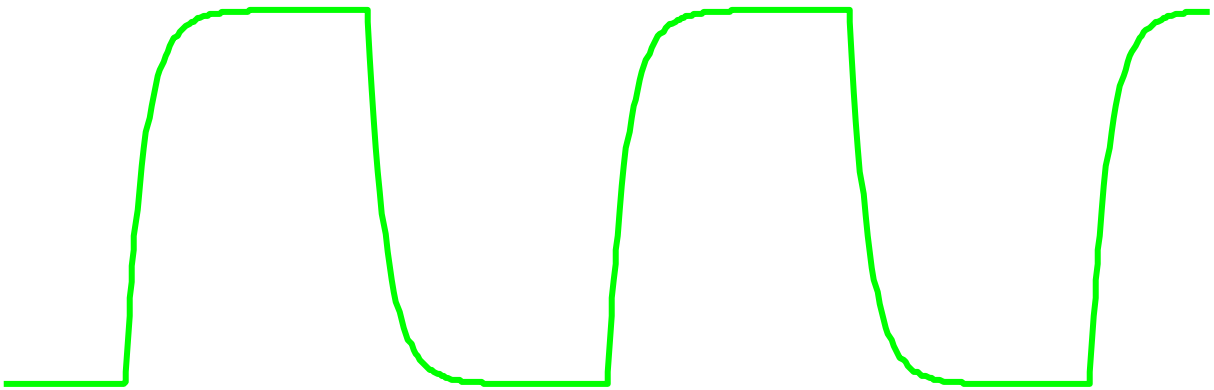
Plot window (wmf)



Plot Window (drawing object)



Extracted waveform from drawing object



Measurement Script Results

* C:\ece531\spice1\edge.mout
fall=3.51612e-007 FROM 3.03215e-006 TO 3.38376e-006
rise=3.51743e-007 FROM 1.02197e-006 TO 1.37371e-006

* C:\ece531\spice1\edge.mout
fall=351.6n FROM 3u TO 3.38u
rise=351.7n FROM 1.02197e-006 TO 1.37371e-006

$$\tau = 160\text{ns}$$

$$t_{\text{fall}} = 2.2\tau$$

$$t_{\text{fall}} = 352\text{ns}$$

Baker Figure 1.24

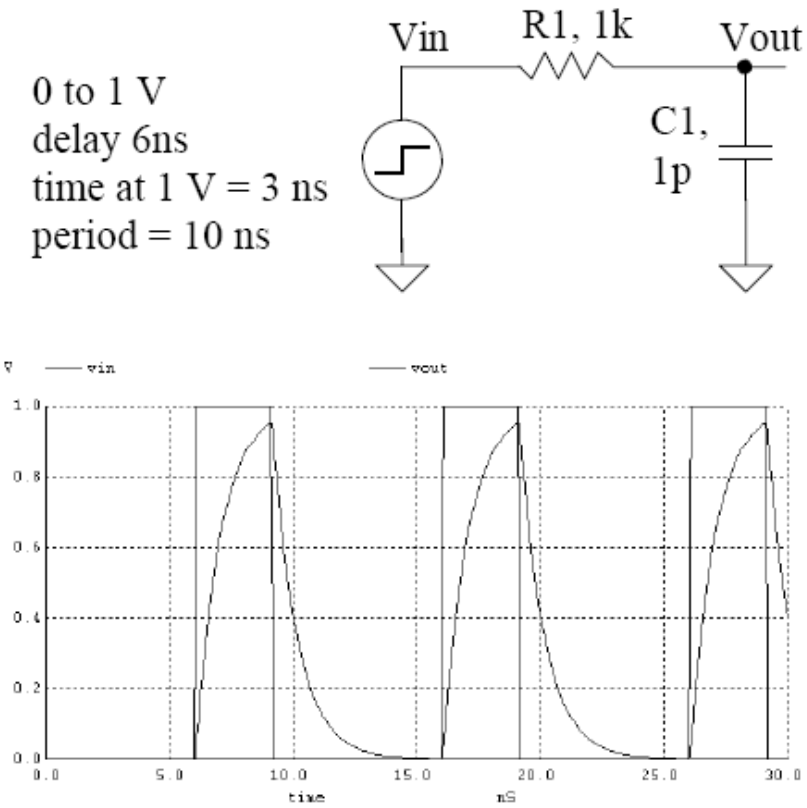


Figure 1.24 Simulating the step response of an RC circuit using a pulsed source voltage.

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