

vsrc_pulse10.ebe

Attributes

```
ebe name=vsrc_pulse10 limit_tstep=yes
Jacobian: constant
nodes: p n
state_vars:
aux_vars: cur_p
aux_vars_startup: cur_p_s
x_vars:
iparms: i0=0 n1=2
sparms:
rparms:
+ t1 =1 t2 =2 t3 =3 t4 =4 t5 =5
+ t6 =6 t7 =7 t8 =8 t9 =9 t10=10
+ t11=11 t12=12 t13=13 t14=14 t15=15
+ t16=16 t17=17 t18=18 t19=19 t20=20
+ y_low=0 y_high=5 t_rise=10n t_fall=10n
+ epsl=0
stparms:
igparms:
outparms: i v
```

Description

vsrc_pulse10.ebe is a voltage source connected between nodes p and n, which can be used for generating pulses. Up to 20 transitions between y_low and y_high are allowed, the actual number of transitions being set by the integer parameter n1. The real parameters t1, t2, etc. are the starting times of the transitions. t_rise and t_fall are the rise and fall times of the transitions, respectively.

The effect of the various parameters of vsrc_pulse10.ebe is shown in the following figures.

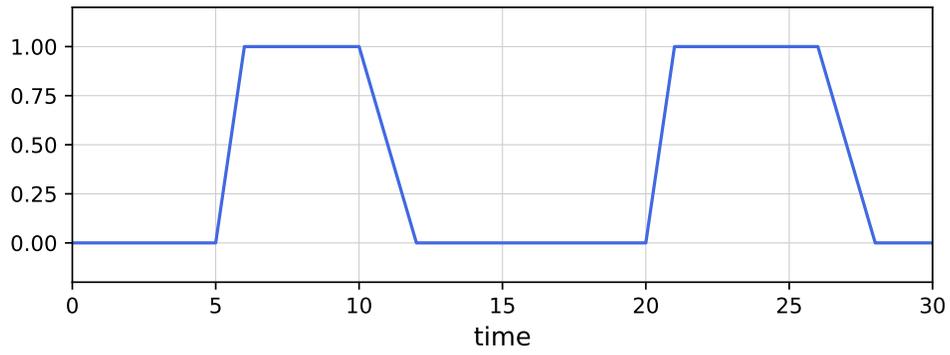


Figure 1: Output of `vsrc_pulse10.ebe` obtained with `i0 = 0`, `n1 = 4`, `t1 = 5`, `t2 = 10`, `t3 = 20`, `t4 = 26`, `y_low = 0`, `y_high = 1`, `t_rise = 1`, `t_fall = 2`.

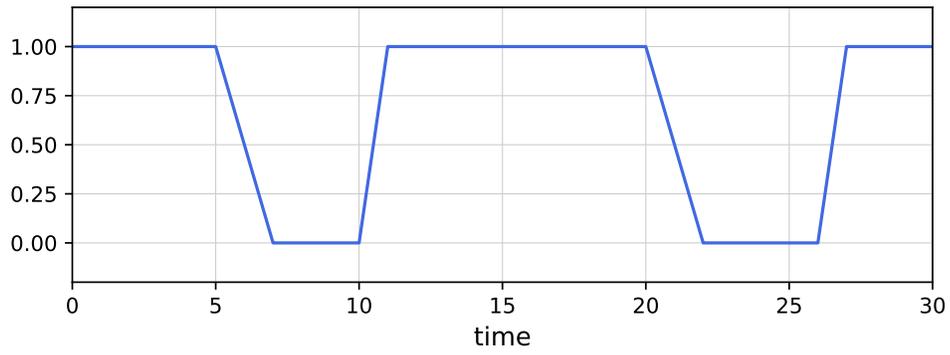


Figure 2: Output of `vsrc_pulse10.ebe` obtained with `i0 = 1`, `n1 = 4`, `t1 = 5`, `t2 = 10`, `t3 = 20`, `t4 = 26`, `y_low = 0`, `y_high = 1`, `t_rise = 1`, `t_fall = 2`.