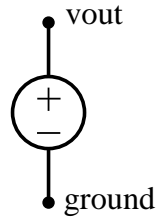


## sampler2.ece



### Attributes

```
mainnodes: vout ground
ind_nodes: vin
rparms: tperiod=10u t0=0 dt=1u
```

### Description

**sampler2.ece** is used to sample a signal (node voltage at the node **vin**) at a specified interval. The sampled quantity is made available as a voltage between nodes **vout** and **ground**. The parameters have the following meaning:

**tperiod**: sampling interval.

**t0**: offset which determines the position of the first sample.

**dt**: **dt** specifies the interval used to force a time point before the sampling time. **dt** should be small as compared to **tperiod**.

AC behaviour is not implemented.

Fig. 1 shows results obtained with **sampler2.ece**. The corresponding circuit file is given below.

```

title: testing of sampler2.ece

begin_circuit
    eelement type=vsrcac p=b n=a a=5 f_hz=1k
    eelement type=sampler2 vin=b vout=dout ground=a
+   tperiod=0.1m t0=0 dt=0.2u
    refnode=a
    outvar:
+   vb=nodev_of_b
+   vdout=nodev_of_dout
end_circuit

begin_solve
    solve_type=startup
    initial_sol initialize
end_solve

begin_solve
    solve_type=trns
    initial_sol previous
    begin_output
        filename=samlertest1e.dat
        variables: vb vdout
    end_output
    method: norm_2=1.0e-5 itmax_trns=10000 back_euler=yes
+   t_start=0 t_end=1m delt_const=0.02m delt_min=0.1u
end_solve

end_cf

```

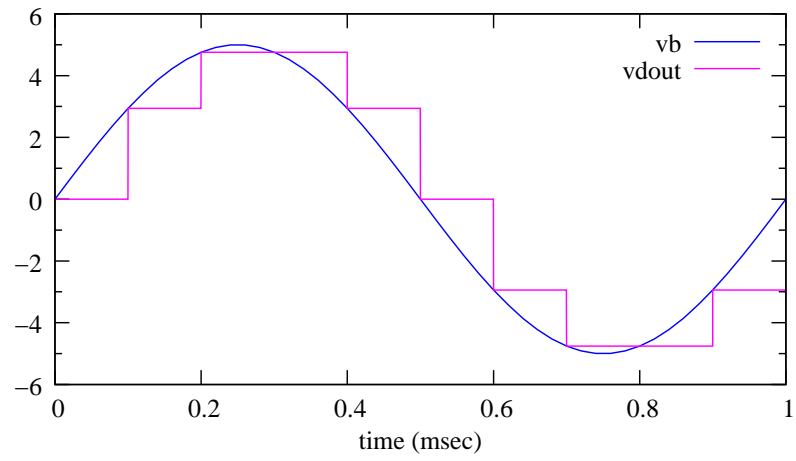


Figure 1: Waveforms obtained with `sampler2.ece` (see the circuit file for details).