sampler2.gce

Attributes

```
mainvars: x y
rparms: tperiod=10u t0=0 dt=1u
```

Description

`sampler2.gce` is used to sample a signal `x` at a specified interval. The sampled quantity is made available as `y`. 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.gce`. The corresponding circuit file is given below.

```
title: testing of sampler2.gce

begin_circuit
   gelement type=vsrcac vxn=v a=5 f_hz=1k
   gelement type=sampler2 x=v y=v1
+     tperiod=0.05m t0=0 dt=0.2u

   outvar:
+     v=var_of_v
+     v1=var_of_v1
end_circuit

begin_solve
   solve_type=startup
   initial_sol initialize
end_solve

begin_solve
   solve_type=trns
   initial_sol previous
   begin_output
      filename=samplertest2.dat
      variables: v v1
   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
```

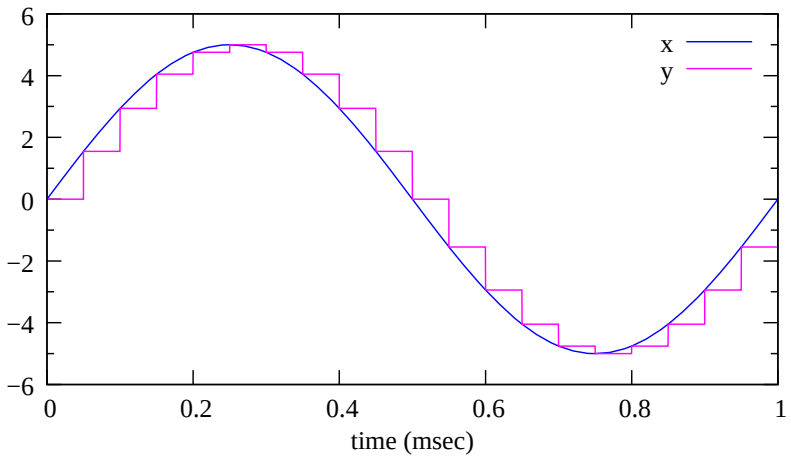

Figure 1: Waveforms obtained with `sampler2.gce` (see the circuit file for details).