

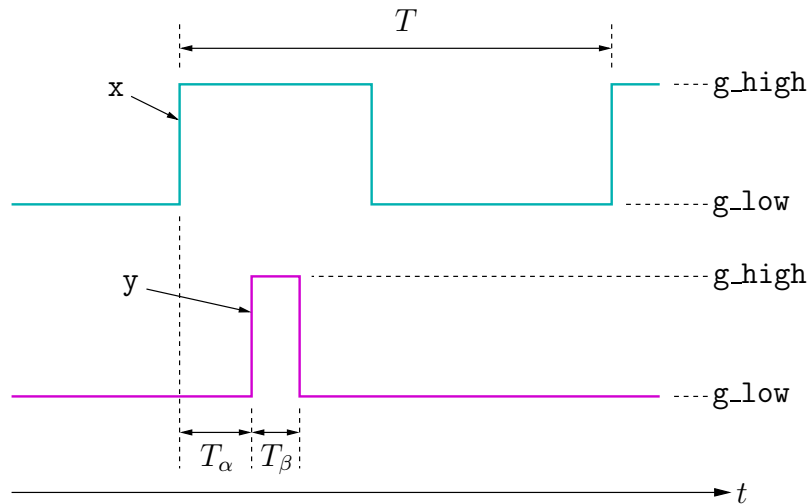
gate_pulse_3.gce

Attributes

```
mainvars: x y alpha
rparms:
+ frequency=50
+ beta=20
+ g_low=0
+ g_high=1
+ delt_nrml=1.0e-3
+ delt_min=1.0e-6
```

Description

`gate_pulse_3.gce` can be used to produce a pulse (y), triggered by a positive-going edge of the input variable x (see figure). The input x is assumed to be periodic and rectangular, with the frequency specified by the real parameter **frequency**. The pulse duration is determined by the real parameter **beta** (in degrees) and is computed as $T_\beta = \frac{\beta \times T}{360}$. The pulse is delayed with respect to the positive edge of x , the delay being specified by the variable **alpha** (in degrees). The delay interval is computed as $T_\alpha = \frac{\alpha \times T}{360}$. The delay angle α is internally restricted to the range $2^\circ < \alpha < 358^\circ$.



The parameters `delt_min` and `delt_nrml` denote the minimum and normal time step, respectively. They are used to ensure that the transitions (from low to high and high to low) are captured with a good resolution. `delt_min` should be generally set to be small (by a factor of 10 to 100) compared to `delt_nrml`.

AC behaviour is not implemented.