

## vtof1.gce

### Attributes

```
mainvars: v w  
rparms: vmin=1 vmax=4 fmin=1e6 fmax=2e6
```

### Description

vtof1.gce is an ideal “voltage-to-frequency converter.” It employs the following equations to relate the general variables  $v$  and  $w$ :

$$\begin{aligned} k &= 2\pi \frac{f_{\max} - f_{\min}}{v_{\max} - v_{\min}}, \\ \omega &= 2\pi f_{\max} && \text{if } v_{\text{in}} > v_{\max} \text{ ,} \\ \omega &= 2\pi f_{\min} && \text{if } v_{\text{in}} < v_{\min} \text{ ,} \\ \omega &= k(v - v_{\min}) + 2\pi f_{\min} && \text{otherwise .} \end{aligned}$$

AC behaviour is not implemented.