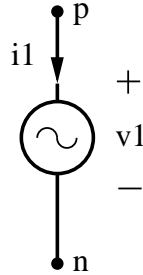


**vsrccac.ece**



### Attributes

```
mainnodes: p n
outvar:
+ i1=cur(p)_of_v0
+ v1=v1_of_v0
rparms:
+ a=0
+ f_hz=1
+ phi=0
+ t0=0
+ vdc=0
outvar_ac: i1ac=cur(p)_of_v0
```

### Description

**vsrccac.ece** is an AC voltage source connected between nodes **p** and **n**. The real parameters, **a**, **f\_hz**, **phi**, and **t0** represent  $A$ ,  $f$ ,  $\phi$ , and  $t_0$ , respectively, in the following equation for the source voltage:

$$V_s(t) = A \sin(2\pi f(t - t_0) + \phi) .$$

Note that the value of **phi** needs to be supplied in degrees. It is internally converted to radians. The output variables **i1** and **v1** are the branch current and branch voltage, respectively.

In AC analysis, **vsrccac** is replaced by a voltage source  $A\angle\phi$ . The output variable **i1ac** is the AC branch current.