



## vsrccac.ece

### Attributes

```
mainnodes: p n
outvar: v1=brv_of_v0 i1=brc_of_v0
rparms: a=0 f_hz=1 phi=0 t0=0 vdc=0
outvar_ac: v1ac=brv_of_v0 i1ac=brc_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:

$$V_s(t) = A \sin(2\pi f(t - t_0) + \phi) . \quad (1)$$

The output variables **i1** and **v1** are the branch current and branch voltage, respectively.

In AC analysis, **vsrccac** is replaced by a voltage source  $A\angle\phi$ . **i1ac** and **v1ac** are the AC branch current and branch voltage, respectively.