

`isrcac.ece`



Attributes

```
mainnodes: p n
outvar:
+ v1=v1_of_i0
+ i1=cur(p)_of_i0
rparms:
+ a=0
+ f_hz=1
+ phi=0
+ t0=0
outvar_ac:
+ i1ac=cur(p)_of_i0
```

Description

`isrcac.ece` is an AC current source connected between nodes **p** and **n**. The real parameters, **a**, **f_hz**, **phi**, and **t0** represent A , f , ϕ , and t_0 , respectively, in the following equation for the source voltage:

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

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 (from **p** to **n**) and branch voltage (from **p** to **n**), respectively.

In AC analysis, `isrcac` is replaced by a current source $A\angle\phi$. **i1ac** is the AC branch current.