```
clear all
syms R C w E Eff positive
syms s
netlist={'V1 1 0 E'
    'R1 1 2 R'
    'C1 2 0 C'
    'C2 1 3 C'
    'R2 3 0 R'};
[X name]=fspice(netlist)
```

```
** fspice 2.43  ** (c) Frederic Martinez
X =
```

$$\begin{pmatrix} \mathrm{E} \\ \frac{\mathrm{E}}{C\,R\,s+1} \\ \frac{C\,\mathrm{E}\,R\,s}{C\,R\,s+1} \\ -\frac{2\,C\,\mathrm{E}\,s}{C\,R\,s+1} \end{pmatrix}$$

```
name = 1×4 cell
'V(1)'      'V(2)'      'V(3)'      'I(V1)'
```

```
s=1i*w;
E=Eff*sqrt(2);
VA=X(2);
VB=X(3);
VA_B=simplify(subs(VA-VB))
```

```
VA_B =
```

$$-\frac{\sqrt{2}\ \mathrm{Eff}\ \left(C\,R\,w+\mathrm{i}\right)}{C\,R\,w-\mathrm{i}}$$

```
VA_B_eff=sqrt(VA_B*conj(VA_B))/sqrt(2)
```

```
VA_B_eff = Eff
```

```
Phi=angle(VA_B);
eqn=Phi+pi/2==0;
w0=solve(eqn,w)
```

```
w0 =
```

$$\frac{1}{C\,R}$$