

Equation

Eqn2

$R=1k$

$C=1u$

Equation

Eqn1

$S=in.v*(real(Pr1.i)-i*imag(Pr1.i))$

$P=real(S)$

$Q=imag(in.v*(real(Pr1.i)-i*imag(Pr1.i)))$

ac simulation

AC1

Type=lin

Start=10 Hz

Stop=10 kHz

Points=400

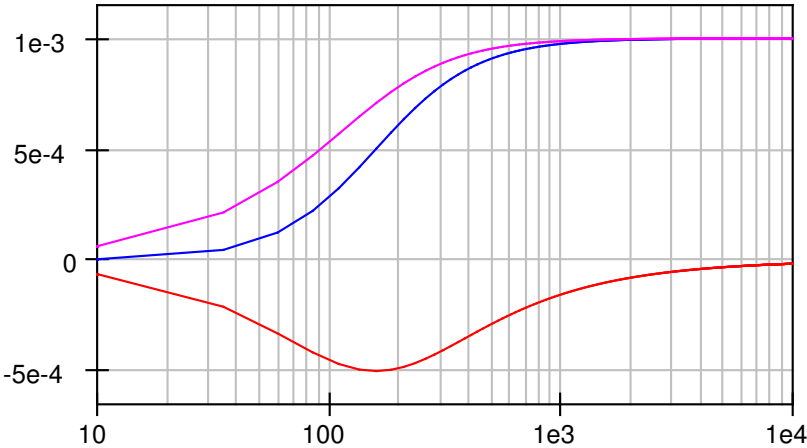
transient simulation

TR1

Type=lin

Start=0

Stop=10 ms



RC\_SPQ\_ngspice:ac.s

RC\_SPQ\_ngspice:ac.q

RC\_SPQ\_ngspice:ac.p

frequency

frequency

frequency

```
* Qucs 0.0.19 /home/vvk/.qucs/RC_SPQ.sch
.PARAM R={1k}
.PARAM C={1u}
VPr1 in _net1 DC 0 AC 0
V1 in 0 DC 0 SIN(0 1 300 0 0) AC 1
C1 0 _net0 {C}
R1 _net1 _net0 {R}
.control
set filetype=ascii
echo "" > spice4qucs.cir.noise
let R=1k
let C=1u
AC LIN 400 10 10K
let S=V(in)*(real(VPr1#branch)-i*imag(VPr1#branch))
let P=real(S)
let Q=imag(V(in)*(real(VPr1#branch)-i*imag(VPr1#branch)))
write RC_SPQ_ac.txt VPr1#branch v(in) S P Q
destroy all
reset

TRAN 3.33333e-05 0.01 0
write RC_SPQ_tran.txt VPr1#branch v(in)
destroy all
reset

exit
.endc
.END
```