



NGSPICE

```
.control
tran 100p 500n
meas TRAN tdiff TRIG v(VOUT) VAL=0.9 RISE=500 TARG v(VOUT) VAL=0.9 RISE=501
let freq = 1 / tdiff
print freq
.endc
```

NGSPICE1

```
.control
tran 100p 500n 0 10p
plot VOUT
.endc
```

MODELS

```
.include $::180MCU_MODELS/design.ngspice
.lib $::180MCU_MODELS/sm141064.ngspice typical
```