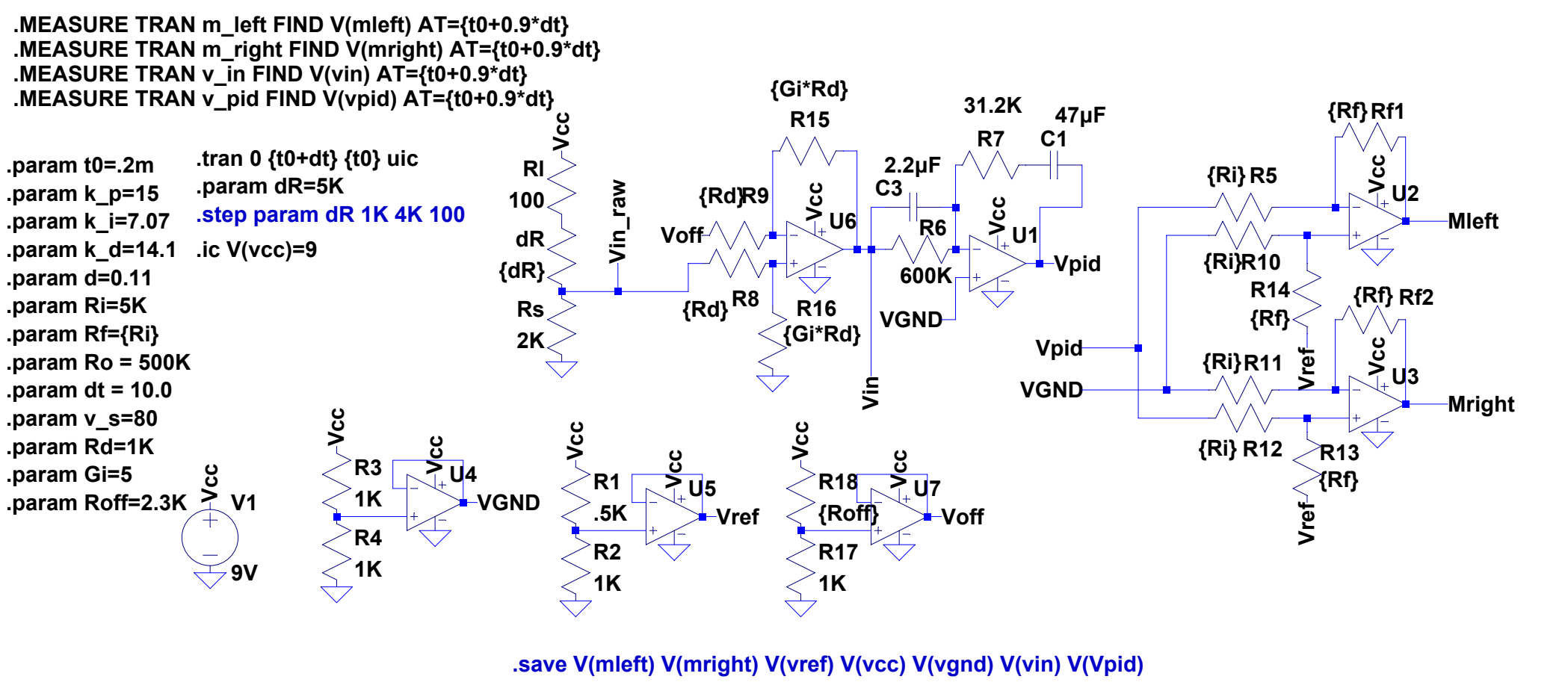
.MEASURE TRAN m_left FIND V(mleft) AT={t0+0.9*dt}
.MEASURE TRAN m_right FIND V(mright) AT={t0+0.9*dt}
.MEASURE TRAN v_in FIND V(vin) AT={t0+0.9*dt}
.MEASURE TRAN v_pid FIND V(vpid) AT={t0+0.9*dt}
.param t0=.2m
.param k_p=15
.param k_i=7.07
.param k_d=14.1
.param d=0.11
.param Ri=5K
.param Rf={Ri}
.param Ro = 500K
.param dt = 10.0
.param v_s=80
.param Rd=1K
.param Gi=5
.param Roff=2.3K
.tran 0 {t0+dt} {t0} uic
.param dR=5K
.step param dR 1K 4K 100
.ic V(vcc)=9
Vcc
V1
9V
Rl
100
dR
{dR}
Rs
2K
Vin_raw
{Rd}R9
Voff
{Rd}
R8
{Gi*Rd}
R15
R16
{Gi*Rd}
U6
Vin
2.2µF
C3
R6
600K
VGND
31.2K
R7
C1
U1
Vpid
R3
1K
R4
1K
U4
VGND
R1
.5K
R2
1K
U5
Vref
R18
{Roff}
R17
1K
U7
Voff
Vpid
VGND
{Ri} R5
{Ri}R10
R14
{Rf}
{Ri}R11
{Ri} R12
R13
{Rf}
Vref
{Rf} Rf1
U2
Mleft
{Rf} Rf2
U3
Mright
.save V(mleft) V(mright) V(vref) V(vcc) V(vgnd) V(vin) V(Vpid)