RAMP GENERATOR

VDD

V1
5

R4
1K

Vcm

R5
1K

R1
25K

C1
10nF

VDD
U1

Vcm

Vramp

R2
10K

+IN

-IN

R3
50K

VDD

+V

LM339

-V

OUT

Vsqr

R6
4.4K

V2
5

RAMP GENERATOR

PWM MODULATOR

Vin_a

V3
SINE(2.5 0.49 312.5)

C2
4.7µF

R7
10K

Vcm

U2

R8
10K

Vramp

Vin_a-

V7
5

+IN

LM339

+V

OUT

-IN

-V

R10
10K

Vpwm_n

V5
5

Vin_a+

Vramp

+IN

LM339

+V

OUT

-IN

-V

Vpwm_p

R9
10K

V6
5

PWM MODULATOR

.include C:\Users\maity\OneDrive\Documents\LTspice\sub\LM339.sub
.tran 0 10m 0 0.1u