M1
R6020PNJ

V2
Rser=0.01
PULSE(0 10 {delay1} 10n 10n {ton} {tperiod})

R12
0.01

R11
0.01

R3
10

M3
R6020PNJ

D1
RFN10NS8D

V3
Rser=0.1
PULSE(0 10 1m 50n 50n 8m 10m)

R2
10k

R7
10

M5
R6020PNJ

D3
RFN10NS8D

V6
PULSE(0 10 11m 50n 50n 8m 10m)

R6
10k

L2
100n

R10
0.1

V1
SINE(0 339 50)
Rser=0.01

C2
100n

C1
1µ

L1
500µ

R1
24

.param totdead = {tperiod - 2 * ton}
.param tdead = {totdead/2}

.param tperiod = 20u
.param ton = 9u
.param delay1 = {tdead/2}
.param delay2 = {tdead/2 + tperiod/2}

R9
10

M6
R6020PNJ

D2
RFN10NS8D

V7
PULSE(0 10 11m 50n 50n 8m 10m)

R8
10k

R5
10

M4
R6020PNJ
D4
RFN10NS8D

V5
PULSE(0 10 1m 50n 50n 8m 10m)

R4
10k

M2
R6020PNJ

V4
PULSE(0 10 {delay2} 10n 10n {ton} {tperiod})
Rser=0.01

.tran 0 100m 0 startup

--- C:\SMPS Course _H49\Course Folders\Mains heater regulator\Mains voltage _power control to resistor_idealbridge.asc ---