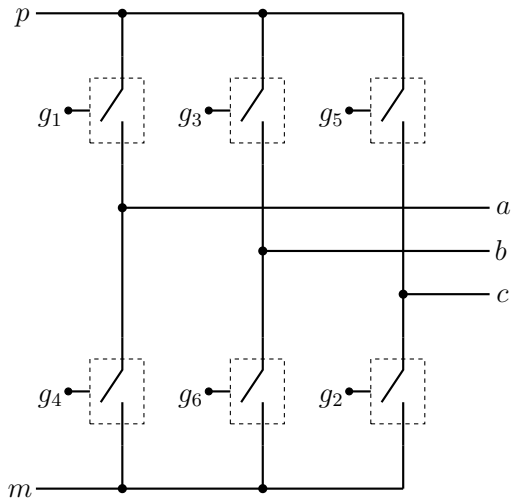


csi3_3.gme



Attributes

```
mainnodes_anlg: a b c p m
main_var: g1
aux_var: g2 g3 g4 g5 g6
iparms:
+ flag_frequency=1
+ flag_period=0
rparms:
+ r_on=1m
+ r_off=100k
+ g_high=1.0
+ t_period=20m
+ frequency=50
+ cap=0.2n
outvar_anlg:
+ g1=var_of_g1
+ g2=var_of_g2
+ g3=var_of_g3
+ g4=var_of_g4
+ g5=var_of_g5
+ g6=var_of_g6
+ is1=i1_of_s1
+ is2=i1_of_s2
+ is3=i1_of_s3
+ is4=i1_of_s4
+ is5=i1_of_s5
+ is6=i1_of_s6
```

Description

`csi3_3.gme` is a current source inverter as shown in the figure. $R_{\text{on}}/R_{\text{off}}$ -type switches are used in the model. The gate signal `g1` is externally supplied, and the other gate signals (`g2` to `g6`) are internally generated. The switch resistance is `r_on` if the corresponding gate input is greater than `g_high/2`; else, it is `r_off`.

The other parameters have the following meaning:

flag_frequency: If this parameter is set to 1, the period of the gate signals is computed using the real parameter `frequency`.

flag_period: If this parameter is set to 1, the period of the gate signals is given by the real parameter `t_period`.

cap: Capacitance added between `a` and `p`, between `b` and `p`, and between `c` and `p`. It may help convergence of the Newton-Raphson process in some cases.

AC behaviour is not implemented.