

#### NOTE

D5 and D6 diodes are present in the schematic only to provide SMA footprint for diodes D1 and D2. Place only D1&D2 or D5&D6.

#### NOTE: About the MOSFETs

Choose a fast (<500ns) MOSFET with continuous rated Drain Current (at 100 C) at least 20% higher than the max current you want to reach. The Overcurrent protection should be set below the rated Drain current at 100 C, and below the motor's rated peak current.

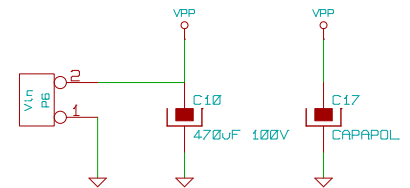
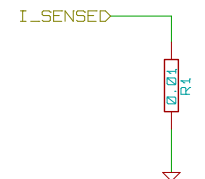
#### NOTE: Power dissipation

Total max power dissipation can be approximated by the formula  $(2 \cdot R_{ds(on)} + R_1) \cdot I^2$ .  
 -  $R_{ds(on)}$  is the MOSFET max. Drain to Source resistance.  
 -  $I$  is the max motor current.  
 It does not consider switching losses, so consider oversizing the heatsink.

#### NOTE

$R_1$  value depends on the maximum current you need. Approx values:

$R_1$	Max. current	Rating
1 Ohm	<2A	2-4W
0.5 Ohm	2A	1-2W
0.33 Ohm	3A	2-3W
0.2 Ohm	5A	3-5W
0.1 Ohm	10A	7-10W
0.05 Ohm	20A	15-20W
0.02 Ohm	30A	20-30W



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