



**MOSFET information:**  
 +. 15v Vgs  
 The Gate is on the left  
 source on the bottom  
 drain on top  
 Collector to emitter voltage  
 max: 80v  
 Collector Current (MAX): 80 ma

$R_{DS(ON)} = 0.022\Omega$   
 power =  $2A_{GND}$   
 $P = R_{DS(ON)} \cdot I^2$   
 $P = 0.022 \cdot 4^2 = 0.352W$   
 $P = 0.088W$   
 heating(max) =  $62 C/W$   
 $\Delta T = 62 C/W \cdot 0.088W$   
 $\Delta T = 5.456 C$ , no need for a heatsink, these will barely heat up

