

THERMAL MANAGEMENT

datasheet p23 104
 $P = 4 \cdot r_{ds} \cdot I_{rms}^2$

Junction-to-case: $19.3^{\circ}\text{C}/\text{W}$
Junction-to-board: $11.5^{\circ}\text{C}/\text{W}$

Power Dissipation:

$4 \cdot 0.75\text{m}\Omega \cdot 2^2 \cdot 0.7 = 8.4\text{W}$
 $< 100^{\circ}\text{C}$ à 25°C amb. $\Delta T 75^{\circ}\text{C}$
 $75^{\circ}\text{C} / 8.4\text{W} = 8.9^{\circ}\text{C}/\text{W}$

$8.4\text{W} \cdot 11.5^{\circ}\text{C}/\text{W} / (11.5\text{W} - 8.4\text{W}) =$
 $31.2^{\circ}\text{C}/\text{W}$

Heatsink max: $30^{\circ}\text{C}/\text{W}$

