

MDmesh™ MOSFETs The Better Way To Cut Heatsinks

Want fast power MOSFETs without massive heatsink overheads? Check out STMicroelectronics' new MDmeshTM (Multiple Drain mesh). MDmesh technology cuts ON-resistance by a factor of three to four, depending on voltage, compared to traditional power MOSFETs. What's more, combining ST's patented Mesh Overlay horizontal layout with a novel drain structure based on multiple vertical p-strip drain results in excellent dV/dt, as well as dynamic performance that is significantly better than that of competitive products. All of which

translates into more efficient devices that help you cut heatsink dimensions and reduce junction temperatures. Want to know more about the hottest technology for efficient, cool running power, go to www.st.com/pmos.

$\begin{array}{c|c} \text{MDmesh Cuts R}_{\text{On}} \times \mathbb{Q}_{g} \\ \hline \text{On resistance x gate charge } [\Omega \times \text{nC}] \\ \hline \text{Standard} \\ \hline \text{500V/0.4}\Omega \\ \hline \text{(T0-247)} \\ \hline \\ \text{10} \\ \hline \\ \text{5} \\ \hline \\ \text{0} \\ \hline \end{array}$

The MDmesh structure, achieves a phenomenal reduction of both on-resistance and gate charge, making it the most suitable switch for high efficiency and high frequency converters.