GaNPower demonstrates high voltage switching at 120A

GaNPower recently released its 60A and 120A bare die series [link_to_product_page] GaNFET and GaN-IC at a voltage rating of 650V/900V, which includes options to drive the Emode GaNFET at the original gate voltage of 6V [G0(6V)] or 12/15V [G1(15V)]. We are pleased to inform that the proprietary gate regulator GaN-IC worked well and we have demonstrated that using Vg=0 to 12V driving at Vbus=500V or above, a max current of 120A can be switched successfully at about 100KHz frequency. The demo packaging was done using TO247-4 with pin-out compatible with conventional IGBT/MOSFET/SiC with lead sequence of D-S-KS-G. This is good news for customers wishing to design power modules for automotive traction driver. Specifically, three or four pairs of the 120A dies would enable the max current needed for EV traction driver.





Double pulse testing results of GPI650120T4 in TO247-4 package. Switching frequency approximately 100KHz and Vg 0 to 12V driving.