Fig. 15 (a) The black curve represents the experimentally measured $D$ of PVDF-TrFE thin film with similar thickness. Inset (a): the electric displacement continuity equation at ferroelectric-graphene interface. Inset (b): a polarized PVDF-TrFE molecule. Cyan, gray, and white atoms represent fluorine, carbon, and hydrogen, respectively. (b) Electric hysteresis loop. $R$ as a function of $V_{TG}$ for the graphene-ferroelectric sample. From the linear part of this curve at high voltage, the charge carrier mobility is estimated to be 700 cm$^2$ V$^{-1}$ s$^{-1}$, taking $\kappa_{PVDF}=10$. (c) Switching from “0” to “0” state in graphene-ferroelectric memory by a full loop sweep of $V_{TG}$ ($\pm 85$ V). (d) Switching from “1” to “1” state by an asymmetrical loop sweep of $V_{TG}$ from (85 to-34 V). (e) Switching from “0” to “1” state (f) Switching from “1” to “0” state