

HIGH-K METAL GATE DEVICE

ABSTRACT

A device includes a substrate with a device region surrounded by an isolation region, in which the device region includes edge portions along a width of the device region and a central portion. The device further includes a gate layer disposed on the substrate over the device region, in which the gate layer includes a graded thickness in which the gate layer at edge portions of the device region has a thickness T_E that is different from a thickness T_C at the central portion of the device region.

Fig 1a