

MOS VARACTORS WITH LARGE TUNING RANGE

ABSTRACT

A MOS varactor includes a shallow PN junction beneath the surface of the substrate of a MOS structure. In depletion mode, the depletion region of the MOS structure merges with the depletion region of the shallow PN junction. This increases the total width of the depletion region of the MOS varactor to reduce $C_{\min}$.

Fig. 2