ABSTRACT

A method for forming a semiconductor device having a capacitor, a resistor and a MOS transistor with characteristics conforming to design. To this end, a polysilicon film (4), a capacitor-dielectric/insulating film (5), a polysilicon film (6) are deposited, and an upper electrode (7) of the capacitor is formed from the polysilicon film (6), and edge portions (7a) of the upper electrode (7) are oxidized. On top of this, an inorganic anti-reflection coating film (9) and a CAP oxide film (10) are deposited and etched to form a mask pattern (12) for forming the capacitor and the resistor. On the other hand, a tungsten silicide film (13), an inorganic anti-reflection coating film (14) and a CAP oxide film (15) are deposited and etched to form a mask pattern (17) for forming a gate electrode. The polysilicon film (4) is etched by using the mask patterns (12) and (17), leaving behind the tungsten silicide film (13) beneath the mask pattern 17.