

ABSTRACT

An α -Si TFT substrate 1 having, formed on a substrate 2, a gate electrode 4, a gate insulating film 6, an α -Si:H(i) film 8, a channel protection layer 10, an α -Si:H(n) film 12, source-drain electrodes 14, 15 formed of metal aluminum as a main component, a source-drain insulating film 16, a metal thin-film buffer layer 18 and a transparent electrode 20. A metal buffer film 18 and a transparent electrically conductive film 20 are formed on the source-drain electrodes 14, 15 and simultaneously etched to form the metal thin-film buffer layer 18 and the transparent electrode 20. In a through hole 22, the source-drain electrodes 15 are out of direct contact with the transparent electrically conductive film 20 due to the metal buffer film 18, so that aluminum in the electrode 15 is not oxidized, and hence there is no increase in contact resistance. There can be therefore provided a TFT substrate and a liquid crystal display which can operate stably and a method for efficiently manufacturing the TFT substrate.



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