

Single-crystal screen of a cathode ray tube is constructed as a single-crystal cathodoluminescent plate mounted on a transparent base, the thermal conductivity of which ensures heat dissipation from the plate during electron impact. Both surfaces of a single-crystal cathodoluminescent plate are mirror-polished. The frontal surface of the single-crystal cathodoluminescent plate has an interference narrow-band coating designed for light transmission emitted by the single-crystal cathodoluminescent plate. The back surface of the single-crystal cathodoluminescent plate has an interference narrow-band coating designed for light transmission emitted by the single-crystal cathodoluminescent plate and a transparent conductive coating.