We have studied the Rashba spin-orbit effect on a quasi-two dimensional semiconductor quantum well with a parabolic potential placed in a magnetic field parallel to the plane of the quantum well, taking into account the Zeeman coupling. The expression for the density of states and the transverse thermoelectric power of the electron gas in a quasi-two-dimensional quantum well with a parabolic potential have been obtained for the case of strong degeneracy statistics. We show that the transverse thermoelectric power depends on the strength of the spin-orbital coupling parameter, the frequency $\omega_0$, which is a characteristic parameter of the electron gas thickness, and the strength of the magnetic field.