

SILICON ON INSULATOR THICK OXIDE STRUCTURE AND PROCESS OF MANUFACTURE

ABSTRACT

A SOI field effect transistor structure (10) providing ESD protection. The structure (10) has a source (28), a drain (32), a body (24) and a gate (30). The gate (30) is formed from a thick oxide layer and a metal contact. The gate is formed during the BEOL process. The transistor (10) may be a p-type transistor or an n-type transistor. The transistor may have its drain (32) tied to either the gate (30), the body (24), or both the gate (30) and body (24). When used as a protection device, the drain (32) is tied to a signal pad and the source (28) is tied to a potential reference.

FIG 2D