

PROCESS FOR FABRICATING A THERMO-OPTIC COMPONENT

ABSTRACT

5 The invention relates to a process for fabricating a thermo-optic component comprising the following steps:

 a) providing an SOI substrate comprising:

 - a surface layer made of single-crystal silicon, extending
in a main plane and placed on a dielectric layer, itself placed
10 on a carrier made of silicon, and

 - at least one buried cavity, which is formed in the carrier
and which opens under the dielectric layer,

 b) forming an optical waveguide extending in the main plane
and comprising a core formed in the surface layer and encircled
15 by an optical confinement layer including the dielectric layer,

 c) producing at least one heating element, on the optical
waveguide, said heating element being positioned, in the main
plane, plumb with a segment of the optical waveguide, or on
20 either side of said segment, the heating element and the segment
of the optical waveguide being located plumb with the -at least
one- buried cavity.

Fig. 2