

PYROELECTRIC INFRARED DETECTION ELEMENT AND INFRARED SENSOR USING THE SAME

ABSTRACT

The pyroelectric infrared detection element has a pyroelectric element including a first electrode and a second electrode opposite to each other and an infrared absorption part. The first electrode and the second electrode are formed on a first surface and a second surface of a pyroelectric substrate in a thickness direction, respectively. The pyroelectric infrared detection element further includes an output terminal unit including a first output terminal and a second output terminal formed on the pyroelectric substrate, a first wiring part designed to connect the first output terminal to the first electrode, and a second wiring part designed to connect the second output terminal to the second electrode. The first wiring part includes a connecting line which is an electrically conductive layer formed on the first surface so as to connect the first output terminal to the first electrode, and a canceling line designed to cancel electric charges generated at the connecting line in response to a change in a temperature of the pyroelectric substrate. The canceling line is an electrically conductive layer formed on the second surface so as to be electrically insulated from the second electrode and to be electrically connected to the connecting line.

(Figure 1)