

615

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Title: Terahertz detector for detecting terahertz wave, has superconductive tunnel junction element that is provided corresponding to each antenna portion with terahertz band area different frequency

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Derwent Primary Accession No.: 2012-G36150

Abstract: NOVELTY - The detector has superconductive tunnel junction elements (15a-15c) that are provided corresponding to each antenna portions (13a-13c) with terahertz band area different frequency. The terahertz detection element (10) detects the terahertz wave formed on the board (11). The antenna portions and the superconductive tunnel junction element are currently formed on one board.

USE - Terahertz detector for detecting terahertz wave.

ADVANTAGE - The terahertz wave the frequency from which each superconductive tunnel junction element differs can be detected effectively. The terahertz wave several band can be detected simultaneously and efficiently. The terahertz detector with excellent broadband property and wavelength filtering function can be obtained.

DESCRIPTION DRAWING(S) - The drawing shows a schematic top view terahertz detector.

Terahertz detection element (10)

Board (11)

Antenna portions (13a-13c)

Superconductive tunnel elements (15a-15c)

Upper wiring (25)

Drawing:

Derwent Class Code(s): U14 (Memories, Film and Hybrid Circuits, Digital memories); W02 (Broadcasting, Radio and Line Transmission Systems)

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