

Aluminum Silicide Schottky Diode For Outdoor Methane Detection In Hostile Environment By

Title:

Aluminum silicide Schottky diode for outdoor gas detection in hostile environment

Abstract:

Detection of methane has major importance in safety and energy issues. Methane detection by spectroscopic technique has been demonstrated successfully by using a simple assembly comprises of an irradiation source and an optical detector. AlSi/Si Schottky diode has been used as an optical detector. IR lamp and solar radiation has been used as an irradiation source. An acrylic window has been used to cut off higher wavelength regions. Detection is performed by means of measuring reverse bias current of the Schottky diode.

Patent application No. 3916/MUM/2013