

PHOTODETECTOR

ABSTRACT

A photodetector is provided with a metal-semiconductor junction for measuring infrared radiation. In another embodiment, the photodetector includes structures to achieve localized surface plasmon resonance at the metal-semiconductor junction stimulated by incident light. The photodetector hence has prompted response and broadband spectra region for photon detection. The photodetector can be used for detecting varied powers of incident light with wavelength from visible to mid-infrared region (300 nm ~ 20 μ m).

Figure 1A