



Agilent R422C

mm-Wave Planar-Doped Barrier Detector

Data Sheet

26.5 to 40.0 GHz

Outstanding Performance

The Planar-Doped Barrier (PDB) diode technology combines the best characteristics of point-contact and low barrier Schottky to provide exceptional performance. This PDB diode technology provides detectors with broadband flatness, excellent square-law response, and low SWR.

These specifications along with the rugged design of the detector make it an excellent value.



Agilent R422C Specifications

Frequency Range: 26.5 to 40 GHz

Frequency Response: ± 0.6 dB

SWR: 1.78

Low Level Sensitivity: 0.42 mV/ μ W

Maximum Operating Input: 100 mW

Typical Short-Term Maximum Input (less than one minute):
1 watt

Video Impedance: 0.5 to 5 k Ω (nominal 1.5 k Ω)

Noise (peak to peak with CW power applied to produce 100 mV output, 400 kHz BW): <50 μ V

Output Polarity (Standard): Negative

Environmental Capabilities

Operating Temperature: -65°C to $+100^{\circ}\text{C}$

Temperature Cycling: MIL-STD-883, Method 1010.1 (-65°C to $+100^{\circ}\text{C}$)

Output Connector: BNC (female)

Equivalent Flange: UG-599/U, MIL-F-3922/54-003

Fits Waveguide Size: EIA WR-28, MIL-W-85/3-006



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