Keysight Technologies
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.

Keysight R422C Specifications

Frequency Range: 26.5 to 40 GHz
Frequency Response: ±0.6 dB
SWR: 1.78
Low Level Sensitivity: 0.42 mV/µW
Maximum Operating Input: 100 mW
Typical Short-Term Maximum Input
    (less than one minute): 1 watt
Video Impedance: 0.5 to 5 kΩ
    (nominal 1.5 kΩ)
Noise (peak to peak with CW power applied to produce 100 mV output, 400 kHz BW):
    <50 µV
Output Polarity (Standard): Negative

Environmental Capabilities
Operating Temperature: −65°C to +100°C
Temperature Cycling: MIL-STD-883,
    Method 1010.1 (−65°C to +100°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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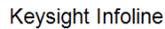
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