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 to +100°C
Temperature cycling: MIL-STD-883, Method 1010.1 (–65 to +100°C)
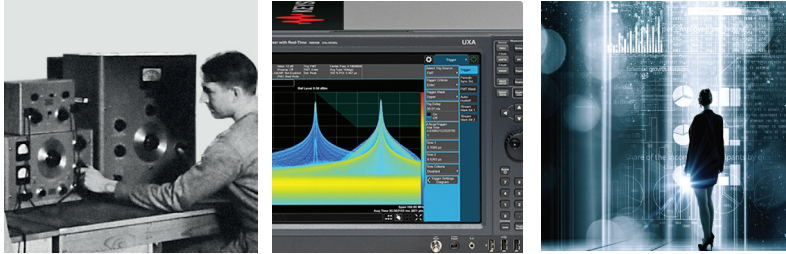Output connector: BNC (female)
Equivalent flange: UG-599/U, MIL-F-3922/54-003
Fits waveguide size: EIA WR-28, MIL-W-85/3-006

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