

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: $0.42 \text{ mV}/\mu\text{W}$

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 μV

Output polarity (standard): Negative

Environmental Capabilities

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

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

Output connector: BNC (female)

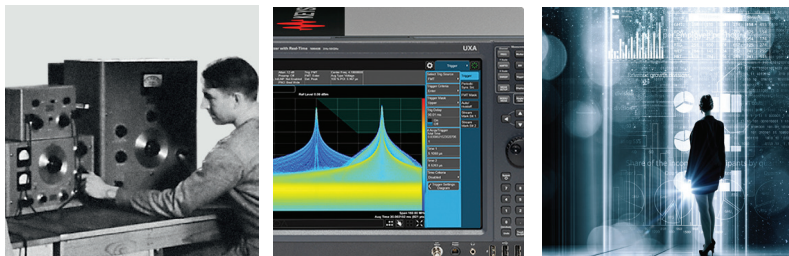
Equivalent flange: UG-599/U,
MIL-F-3922/54-003

Fits waveguide size: EIA WR-28,
MIL-W-85/3-006

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