



Agilent K422C

Waveguide Planar-Doped Barrier Detector

18.0 to 26.5 GHz

Data Sheet



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, plus the rugged design of the detector make it an excellent value.

Agilent Technologies K422C Specifications¹

Frequency Range: 18.0 to 26.5 GHz

Frequency Response: ± 0.4 dB

SWR: 1.36

Low Level Sensitivity: 0.4 mV/ μ W

Maximum Operating Input: 200 mW

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

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 Temperature²: -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-595/U, MIL-F-3922/54C-002

Waveguide Designator: WR-42

EIA MIL-W-85/(x-xxx): 1-102

1. Measured at 25°C and -20 dBm unless otherwise specified.

2. Tested only to 50,000 ft (15,240 m), capable of much higher performance.



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Asia Pacific:

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(fax) (852) 2506 9284

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Printed in U.S.A. 6/00

5965-2881E



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