

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/ 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 to $+100^{\circ}\text{C}$

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

Output connector: BNC (female)

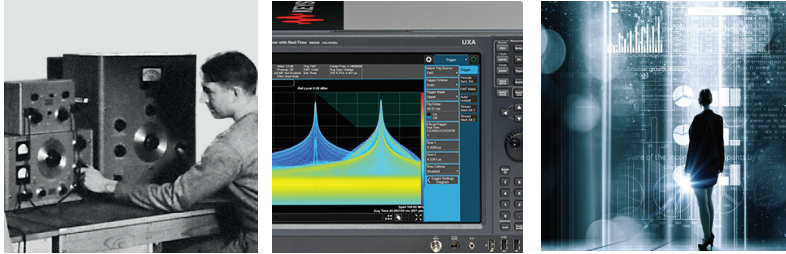
Equivalent flange: UG-599/U,
MIL-F-3922/54-003

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

Evolving Since 1939

Our unique combination of hardware, software, services, and people can help you reach your next breakthrough. We are unlocking the future of technology.

From Hewlett-Packard to Agilent to Keysight.



For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

Americas

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 11 2626
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 6375 8100

Europe & Middle East

Austria	0800 001122
Belgium	0800 58580
Finland	0800 523252
France	0805 980333
Germany	0800 6270999
Ireland	1800 832700
Israel	1 809 343051
Italy	800 599100
Luxembourg	+32 800 58580
Netherlands	0800 0233200
Russia	8800 5009286
Spain	800 000154
Sweden	0200 882255
Switzerland	0800 805353
	Opt. 1 (DE)
	Opt. 2 (FR)
	Opt. 3 (IT)
United Kingdom	0800 0260637

For other unlisted countries: www.keysight.com/find/contactus (BP-9-7-17)

DEKRA Certified
ISO 9001 Quality Management System

www.keysight.com/go/quality
Keysight Technologies, Inc.
DEKRA Certified ISO 9001:2015
Quality Management System

myKeysight

myKeysight

www.keysight.com/find/mykeysight

A personalized view into the information most relevant to you.

http://www.keysight.com/find/emt_product_registration

Register your products to get up-to-date product information and find warranty information.

KEYSIGHT SERVICES

Accelerate Technology Adoption.
Lower costs.

Keysight Services

www.keysight.com/find/service

Keysight Services can help from acquisition to renewal across your instrument's lifecycle. Our comprehensive service offerings—one-stop calibration, repair, asset management, technology refresh, consulting, training and more—helps you improve product quality and lower costs.



Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

Keysight Channel Partners

www.keysight.com/find/channelpartners

Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.



This information is subject to change without notice.
© Keysight Technologies, 2004- 2018
Published in USA, February 13, 2018
5965-2880E
www.keysight.com