

## Wide Band Waveguide Power Detector 26.5GHz-40GHz



### Features

- Fast response time
- WR28 Cover Flange
- Compact size

### Product Description

RWGDECT28A is a wide band waveguide power detector with a frequency range of 26.5 to 40GHz.

The max input power of the detector is 20dBm.

The working temperature of this product is between - 20°C and + 70°C.

### Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

### Electrical Specifications (T<sub>A</sub>=+25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		26.5 - 40		GHz
Input Power			20	dBm
Frequency Response Flatness		±1.2	±1.8	dB
Low Level Sensitivity	0.3	0.4		mV / uW
Output Polarity		Positive (+)		
Weight		-		lbs.
Input / Output Connectors		SMA-Female		
Package		Epoxy Sealed (Standard)		
		Hermetically Sealed (Optional)		

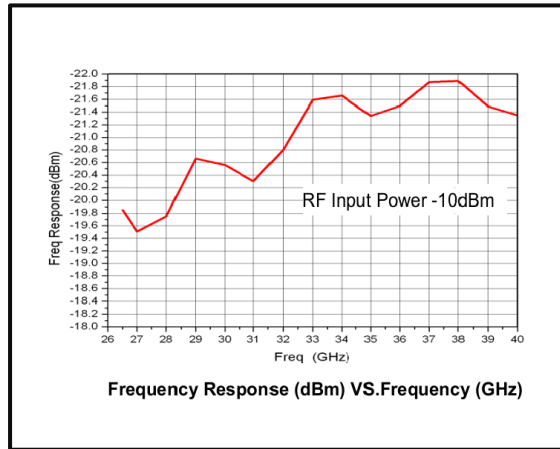
**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-20°C to +70°C (Case Temperature)
Storage Temperature	-40°C to +85°C
Thermal Shock	-20°C → +70°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for 72 Hours
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

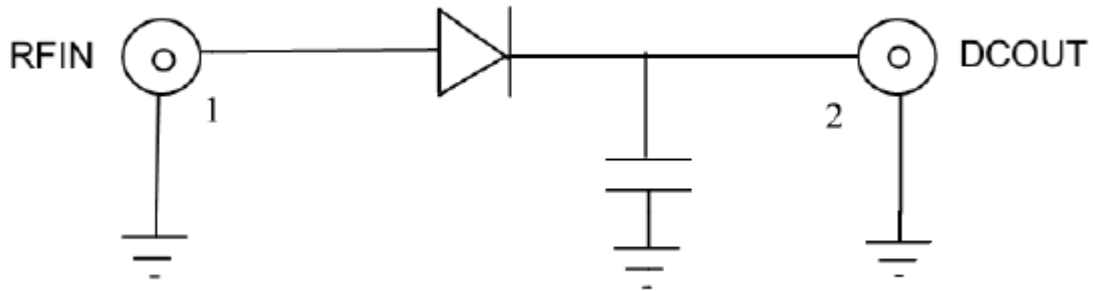
\*\*For vibration testing details please see additional information section.

**Typical Performance Plots**

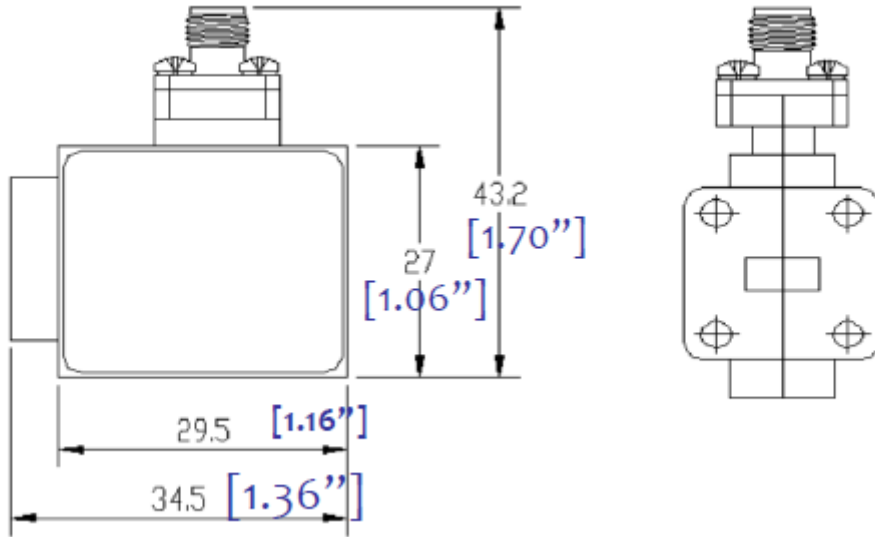
**Frequency Response VS. Frequency**



**Functional Diagram**

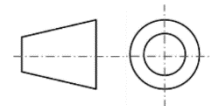


**Outline Drawing**



Notes:

1. Package Material: Brass
2. Finish: Gold Plated
3. All dimensions are in millimeters [inches].
4. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation	Webpage
ESD Policy	<a href="https://rflambda.com/pdf/rflambda_esd_control.pdf">https://rflambda.com/pdf/rflambda_esd_control.pdf</a>
Connector Torque Specifications	<a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>
Random Vibration Test Standard	<a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a>

**Ordering Information**

Part Number	Modification	Description
RWGDECT28A	Connector SMA-Female	26.5GHz-40GHz Wide Band Waveguide Power Detector

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