

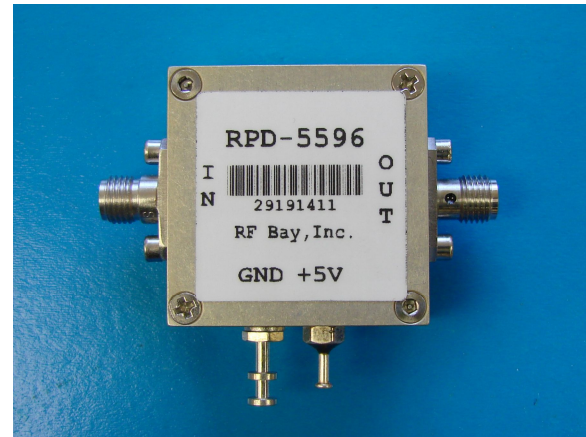
RPD Series

100MHz – 40GHz RF Power Detector

Features

- Frequency Range: 0.1 – 40GHz
- Dynamic Range: 30dB
- Output Range: 0.01 – 1V
- Output Slope: Positive
- Pulse Response Rise Time: 3 μ s
- DC Power: 5V/60mA
- K-2.92mm Input/SMA Output

Picture



Description

RPD-5596 is a Linear-in-dB RMS RF Power Detector with 30dB Dynamic Range operates in wideband from 100MHz to 40GHz. Work for CW or Modulated Waveform.

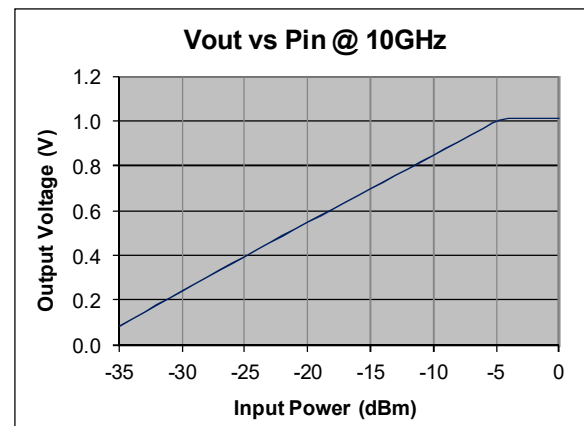
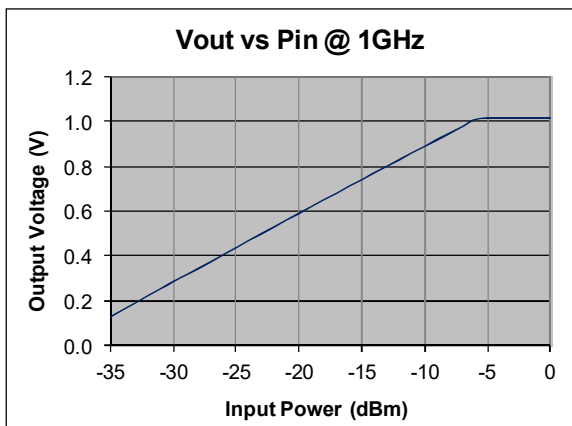
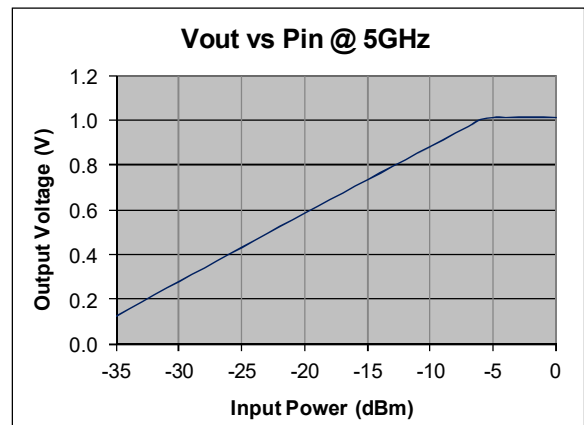
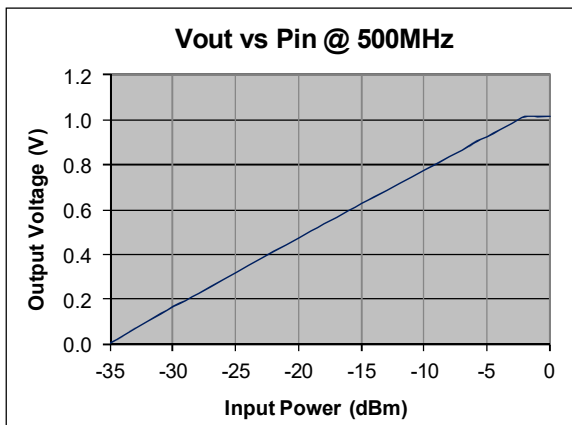
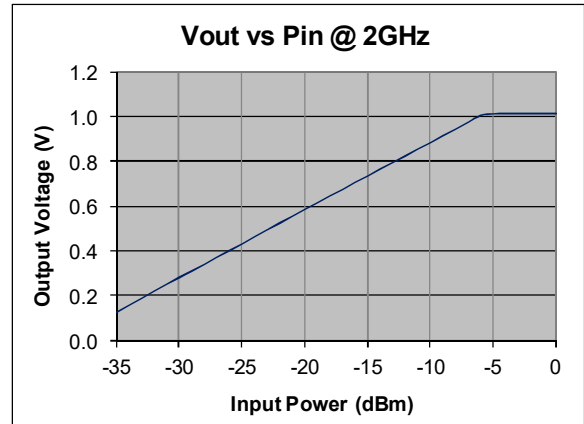
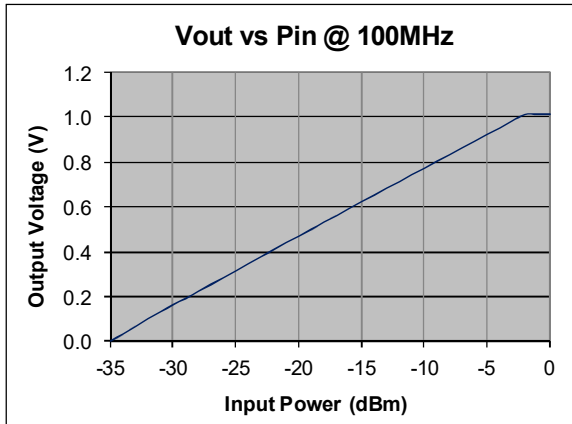
Electrical Specifications @ +25 °C, $Z_{in} = 50 \Omega$, DC Supply = +5V

Parameter	Unit	Minimum	Typical	Maximum
Input Frequency Range	GHz	0.1		40
Dynamic Range	dB	28	30	
Output Voltage				
Pin= -5dBm @ 20GHz	V	0.91	0.97	
Pin=-35dBm @ 20GHz	V	0.01	0.05	
Logarithmic Slope @ 20GHz	mV/dB	24	29	34
Deviation at +25°C	dB			+/-1.0
Deviation v.s. Temperature -40 °C to +85°C	dB			+/-1.5
Pulse Response Time				
Rise Time	μ s		3	5
Fall Time	μ s		10	15
Input VSWR @ 35GHz			1.6:1	2.0:1
Output Current Sink (50 Ω Load)	mA		20	
DC Power Supply	V	4.5	5	15
DC Supply Current	mA		60	80

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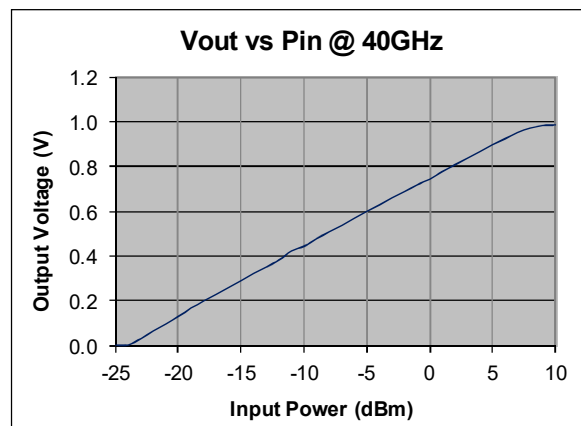
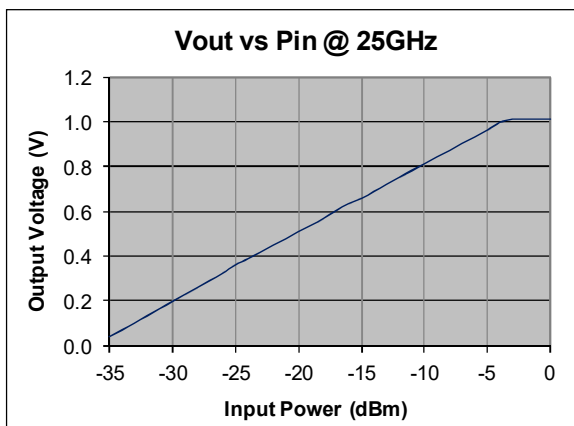
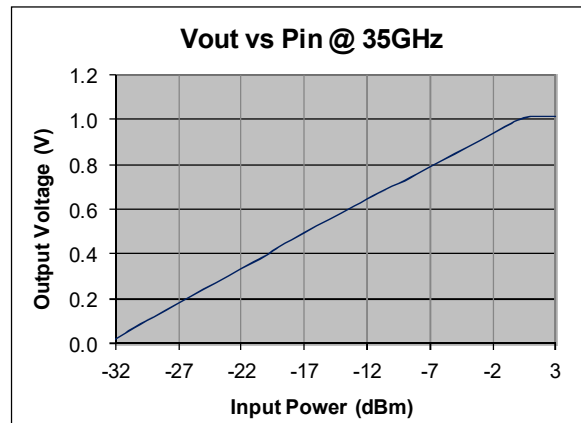
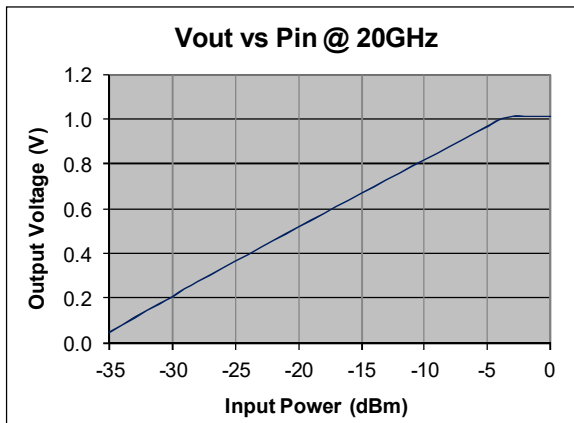
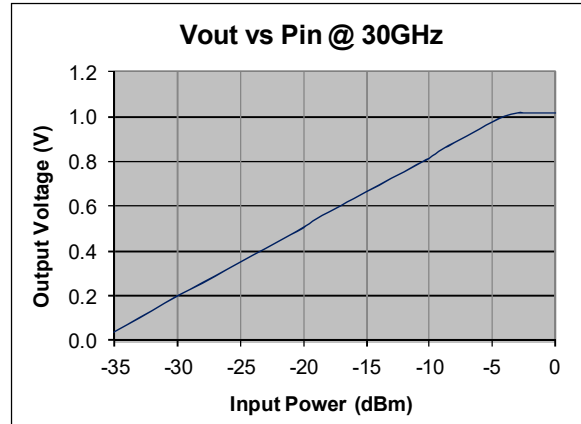
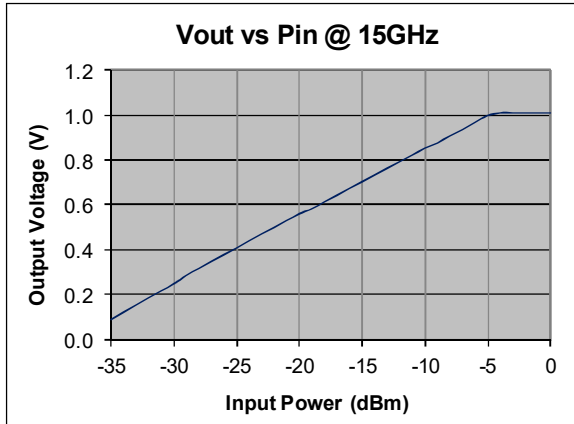
Typical Performance @ +25 °C



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Typical Performance @ +25 °C



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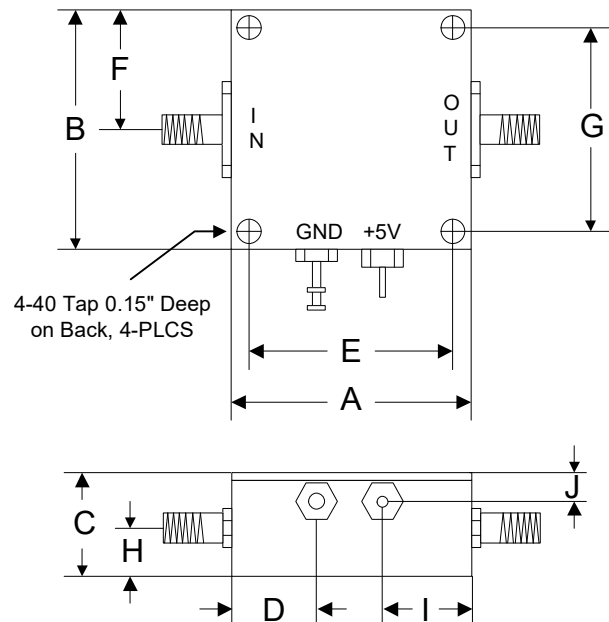
Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+15dBm
DC Supply Voltage	+16V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

ESD Sensitive Material



Outline



	A	B	C	D	E	F	G	H	I	J
Inch	1.250	1.250	0.563	0.450	1.000	0.625	1.000	0.250	0.500	0.187
mm	31.75	31.75	14.29	11.43	25.40	15.88	25.40	6.35	12.70	4.76