

RPD Series

50 – 3000MHz RF Power Detector

Features

- Frequency Range: 50 - 3000MHz
- Dynamic Range: 60dB
- Output Range: 0.1 – 2.5V
- Output Slope: Positive
- Pulse Response: 0.3 μ s
- DC Power: 5V/12mA
- SMA Connector

Picture



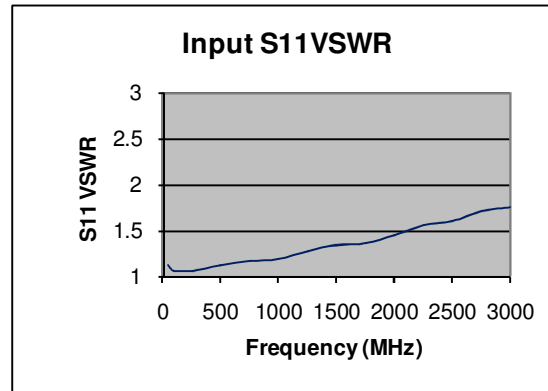
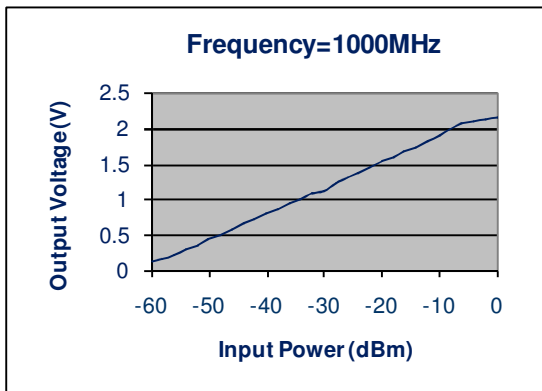
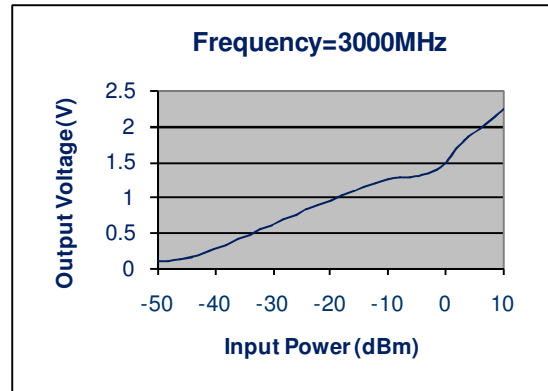
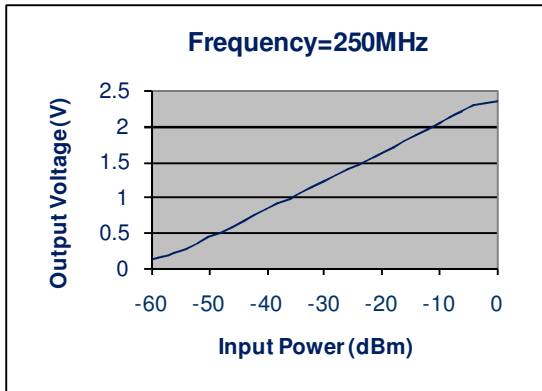
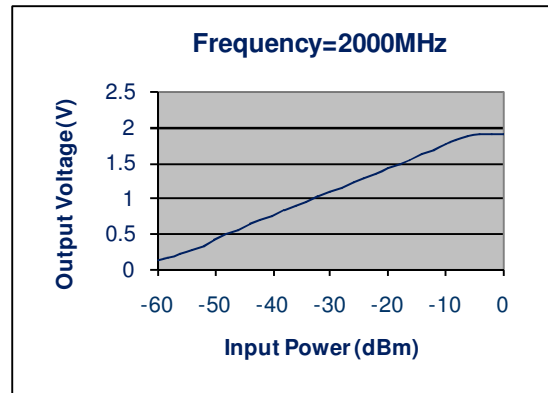
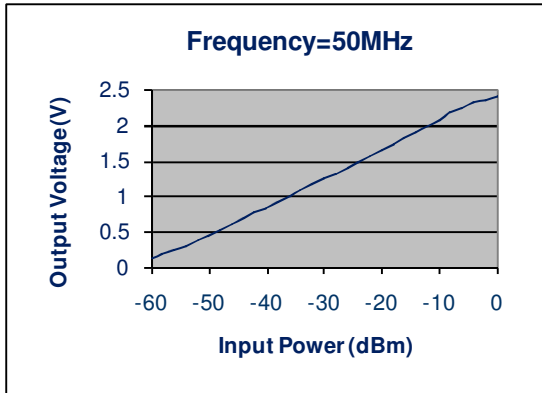
Description

RPD-5534 is a 60dB Linear Dynamic Range RF Power Detector operates in wideband with frequency range from 50MHz to 3000MHz.

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

Parameter	Unit	Minimum	Typical	Maximum
Frequency Range	MHz	50		3000
Dynamic Range	dB		60	
Output Voltage				
Pin= 0dBm @ 1000MHz	V		2.1	
Pin=-60dBm @ 1000MHz	V		0.12	
Logarithmic Slope	mV/dB		41	
Deviation at +25 °C	dB			+/-0.5
Deviation v.s Temperature -40 °C to +85 °C	dB			+/-1.5
Pulse Response Time	μ s		0.3	
Input VSWR @ 1500MHz			1.3:1	
Small Signal Envelope Bandwidth	MHz		30	
Output Current Sink	mA		10	
Output Impedance	Ω		32	
DC Power Supply	V	4.5	5	5.5
Supply Quiescent Current	mA		12	

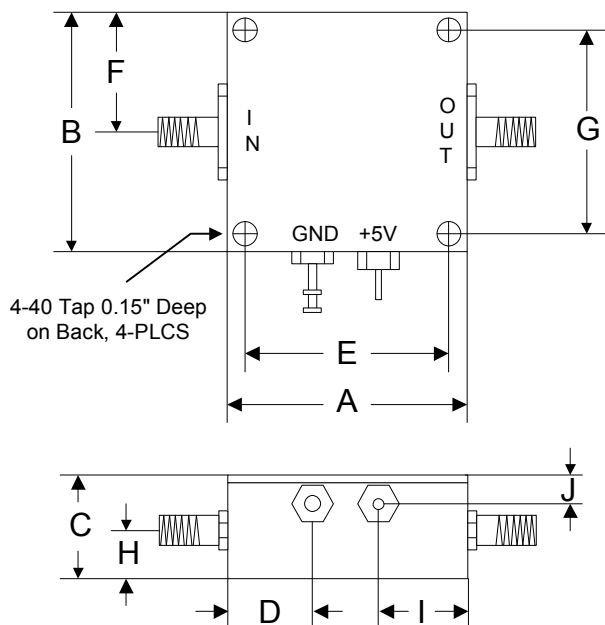
Typical Performance @ +25 °C



Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Input Power	+10dBm
Supply Voltage	+5.5V
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +125 °C

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