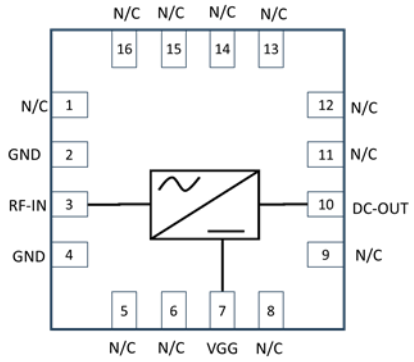
Voltage Detector

PRE-RELEASE DATASHEET RFTSSI07

Features:

- RF Frequency: 5-7 GHz
- Input Return Loss: 16.5 dB
- Input Power Detection : - 10 to 30 dBm
- Detecting Voltage: 0.37 to 8 V
- Diode Bias: 1.3 V
- 0.1um GaAs pHEMT Technology
- Die Size: 1.2 mm * 1.02 mm

Functional Block Diagram



Description:

RFTSSI07 is Voltage Detector that operates 5-7 GHz. The Voltage Detector provides Detecting Voltage 0.37 to 8 V. The input and output are matched to 50 ohms with off-chip DC blocking capacitors.
The device is specifically designed for use in 5-7 GHz frequency in Fixed Wireless Broadband, Microwave Links, WiFi, IoT, Radar Systems, and SATCOM Applications.

The Technology used to design Voltage Detector is 0.1um GaAs pHEMT Process.

Pin Configuration

Pin No.	Pin Name	Description
3	RF-IN	RF Input
10	DC-OUT	DC Output
7	VGG	Gate Voltage
2,4	GND	Ground
1,5,6,7,8,9,11,12,13,14,15,16	N/C	Not Connected

Deliverables:

- Sample Ready Packaged Die
- Test Results
- Product Datasheet

Applications

- Fixed Wireless Broadband
- Microwave Links
- SATCOM
- IoT
- Wi-Fi
- Radar Systems

Signify RF confidential property not to be copied or disclosed without prior authorization.

Electrical Specification:

Freq= 4 – 8 GHz, VDD = 1.3 V, ID= 225 uA, Zo=50 Ω

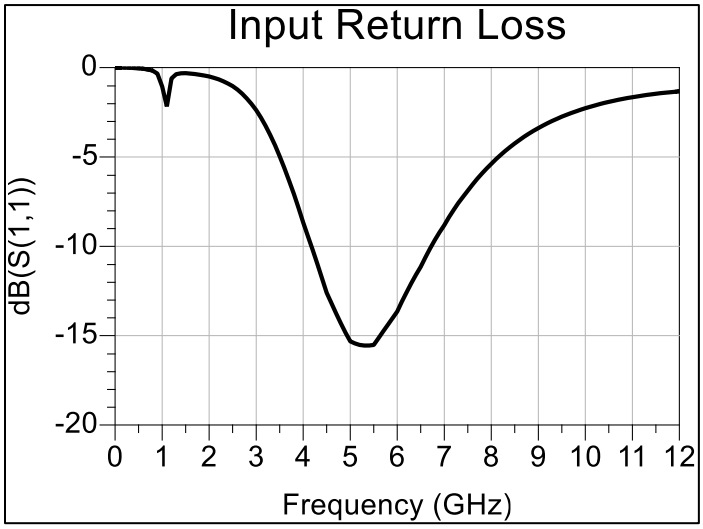
Parameters	Test Condition	Units	Typ
Input Return Loss	5 GHz	dB	16
	6 GHz		16.5
	7 GHz		10.5
Output Voltage	Pin @ -20	V	0.35
	Pin @ 0		0.98
	Pin @ 20		8.13
Operating Bias Conditions			
Drain Current (Id)	-	uA	225
Drain Voltage (VDD)	-	V	1.3
Gate Voltage (VGG)	-	V	_

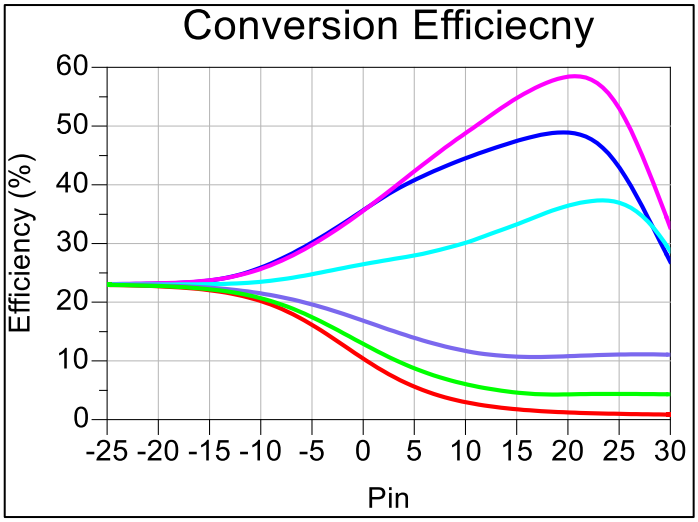
Signify RF confidential property not to be copied or disclosed without prior authorization.

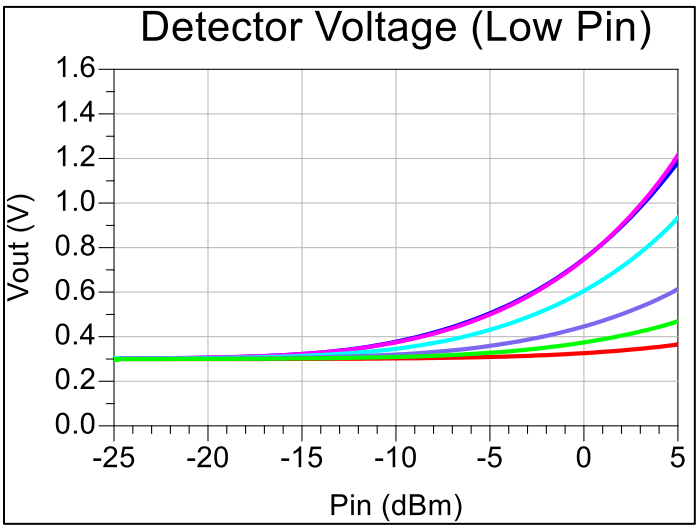
Voltage Detector

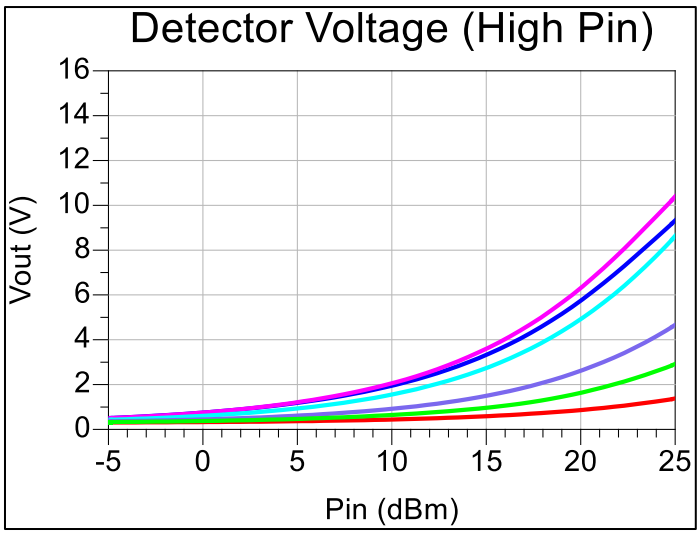
PRE-RELEASE DATASHEET RFTSSI07

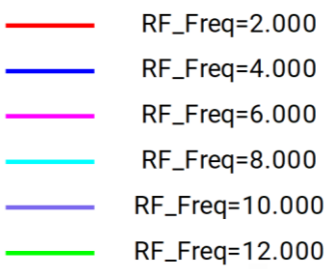
Typical Performance Curves: -











Signify RF confidential property not to be copied or disclosed without prior authorization.

Voltage Detector

PRE-RELEASE DATASHEET RFTSSI07

Disclaimer:

Information in this document is provided in connection with Signify RF products. These materials are provided by Signify RF as a service to its customers and may be used for informational purposes only. Except as provided in Signify RF Terms and Conditions of Sale for such products or in any separate agreement related to this document, RFIC Solutions Inc. assumes no liability whatsoever. Signify RF assumes no responsibility for errors or omissions in these materials. Signify RF may make changes to specifications and product descriptions at any time, without notice. Signify RF makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppels or otherwise, to any intellectual property rights is granted by this document.

Contact information

For the latest specifications, additional product information:

Web: www.signifyrf.com
Email: sales@signifyrf.com
Tel: (+91) 840 356 8957, (+91)9022078131, (+91)8485841789

Signify RF confidential property not to be copied or disclosed without prior authorization.