



# Wright Technologies Inc.

## Broadband Frequency Operation

**TECHNICAL DATA SHEET**

**RoHS COMPLIANT**

**ASL50B-3512**

**0001**

### FEATURES

- \* 1-50 Ghz Frequency Operation
- \* P-1dB: +12 dBm minimum
- \* Small Signal Gain: 35-45 dB
- \* Gain Flatness: +/- 4.25 dB full band
- \* High Output IP3: 22 dBm typ.
- \* Noise Figure: 6.7 dB maximum
- \* 50 Ohm Input and Output Matched
- \* -20 to +55 °C Operating Temperature
- \* Unconditionally Stable
- \* Single DC Bias Supply
- \* Built-in DC Voltage regulation
- \* Small Size and Weight, Yet Robust

### APPLICATIONS

Laboratory Applications  
R&D Lab Use  
Radar Systems  
Electronic Warfare  
Telecom Infrastructure

Test Instrumentation  
Military and Space  
Communications Systems  
Satellite Communications  
Wireless Communications

Microwave Radio Systems  
Power Amplifier  
General Purpose Amplifier  
RF Front Ends  
Fiber Optic Interface

Freq. In GHz	Gain dB	P-1 dBm	Input VSWR	Output VSWR	Noise dB
1.0	42.7	23.5	1.07	1.03	6.0
13.3	36.8	22.2	1.66	1.26	5.4
25.5	41.3	18.2	1.49	1.15	4.0
37.8	42.1	16.8	2.41	2.00	5.4
50.0	38.3	12.4	1.49	2.48	6.4
Min.	36.6	12.4	---	---	---
Max.	44.8	---	2.41	2.48	6.4
Spec.	35-45	12.0 Min	2.50 Max	2.50 Max	6.7 Max

$$\text{Bias @ +12.0 V, IT} = \frac{580}{600} \text{ mA}$$

600 mA TYP

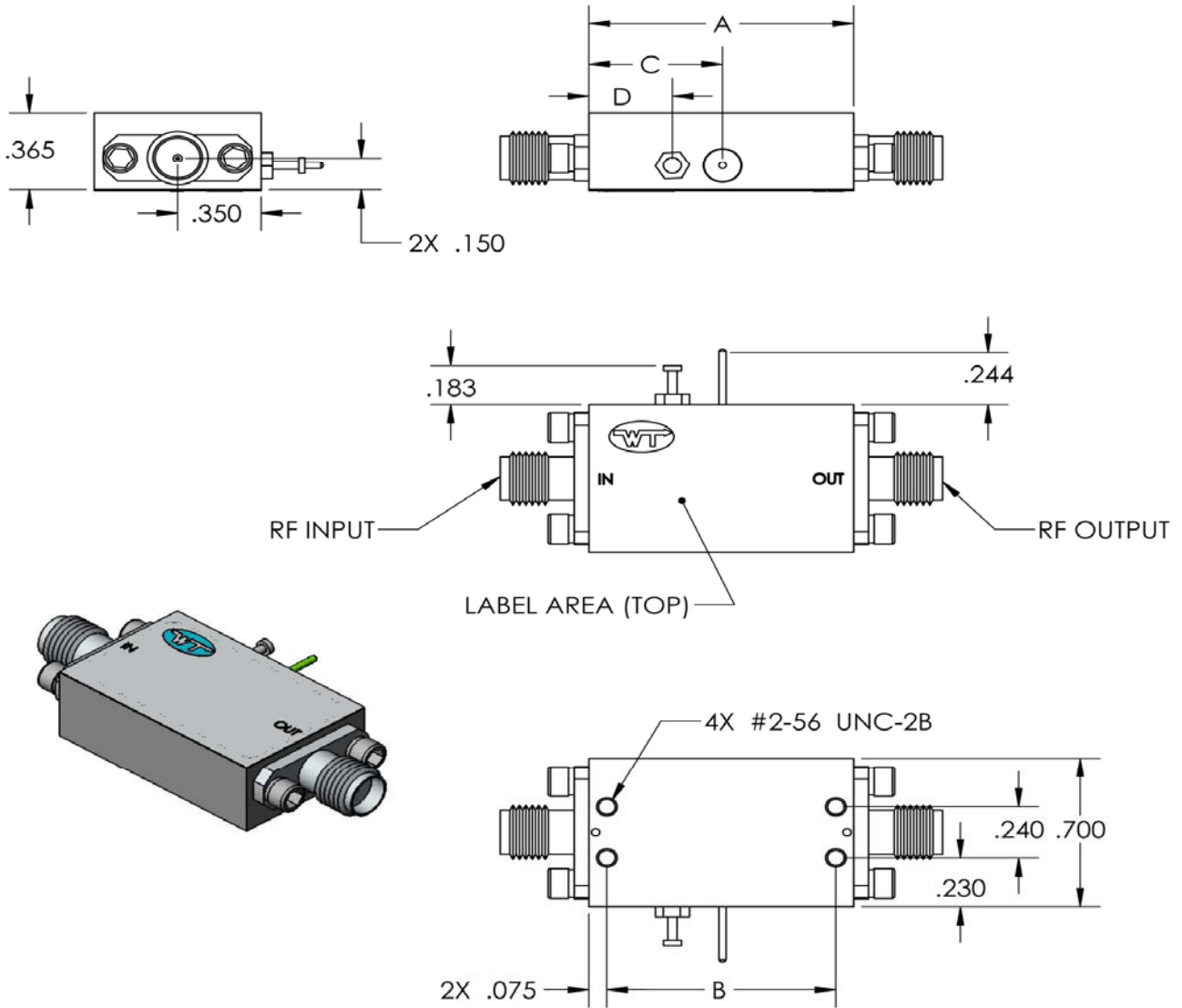
All Measurements Taken at 25°C Ambient Room

Wright Technologies Inc.  
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#### Contact Us

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### ASL50B-3512 6VV TYPE CASE



COAX CONNECTOR OPTIONS:  
 SMA, 2.9mm, 2.4mm

WAVEGUIDE OPTION AVAILABLE  
 UPON CUSTOMER REQUEST

- APPLICATION NOTES:  
 UNLESS OTHERWISE SPECIFIED
- 1) ALL DIMENSION TOLERANCES  $\pm .010$  AFTER PLATING
  - 2) RF CONNECTORS ARE K FEMALE
  - 3) INTERPRET DRAWING PER ASME Y14.5M-1994

TYPE	A	B	C	D
3	.910	.760	.560	.350
4	1.110	.960	.560	.350
6	1.510	1.360	.960	.750
8	1.910	1.760	1.360	1.150

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TITLE

WT KK, VV SERIES



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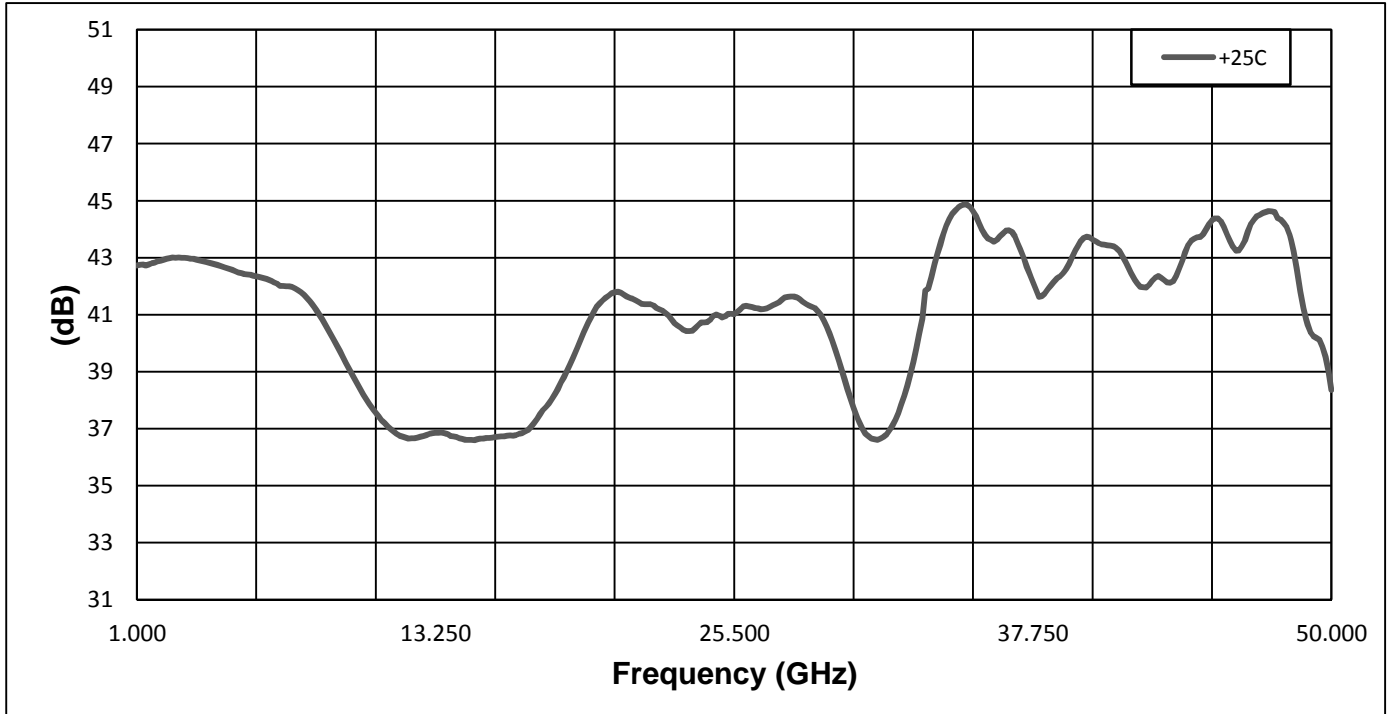
DATA PLOTS

RoHS COMPLIANT

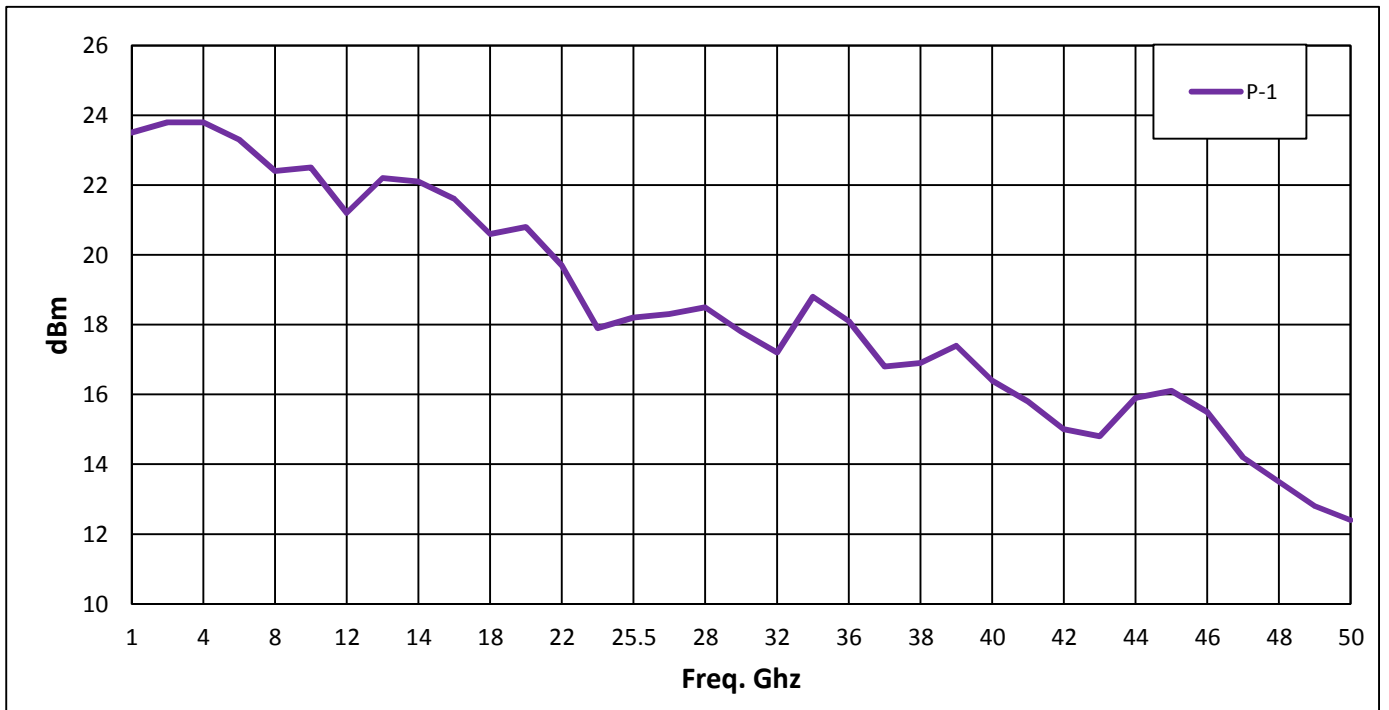
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### Gain



### Power dBm





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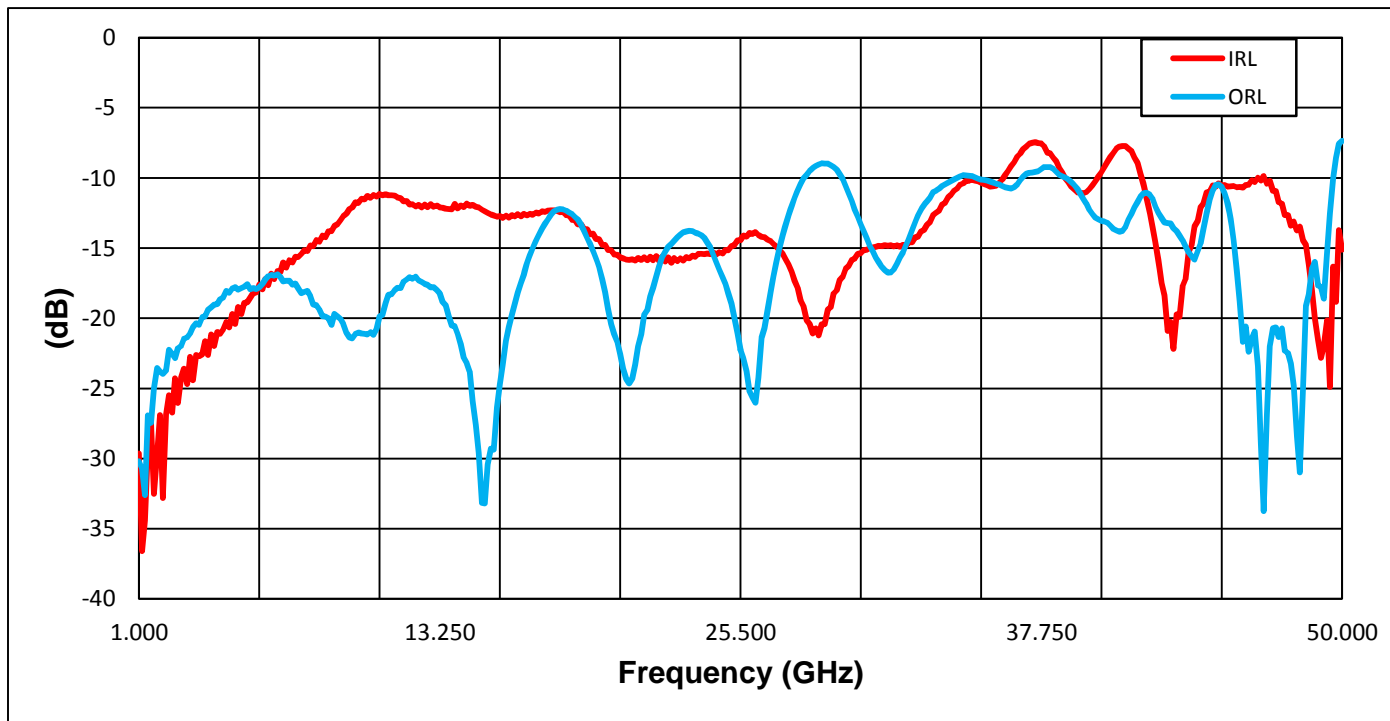
DATA PLOTS

RoHS COMPLIANT

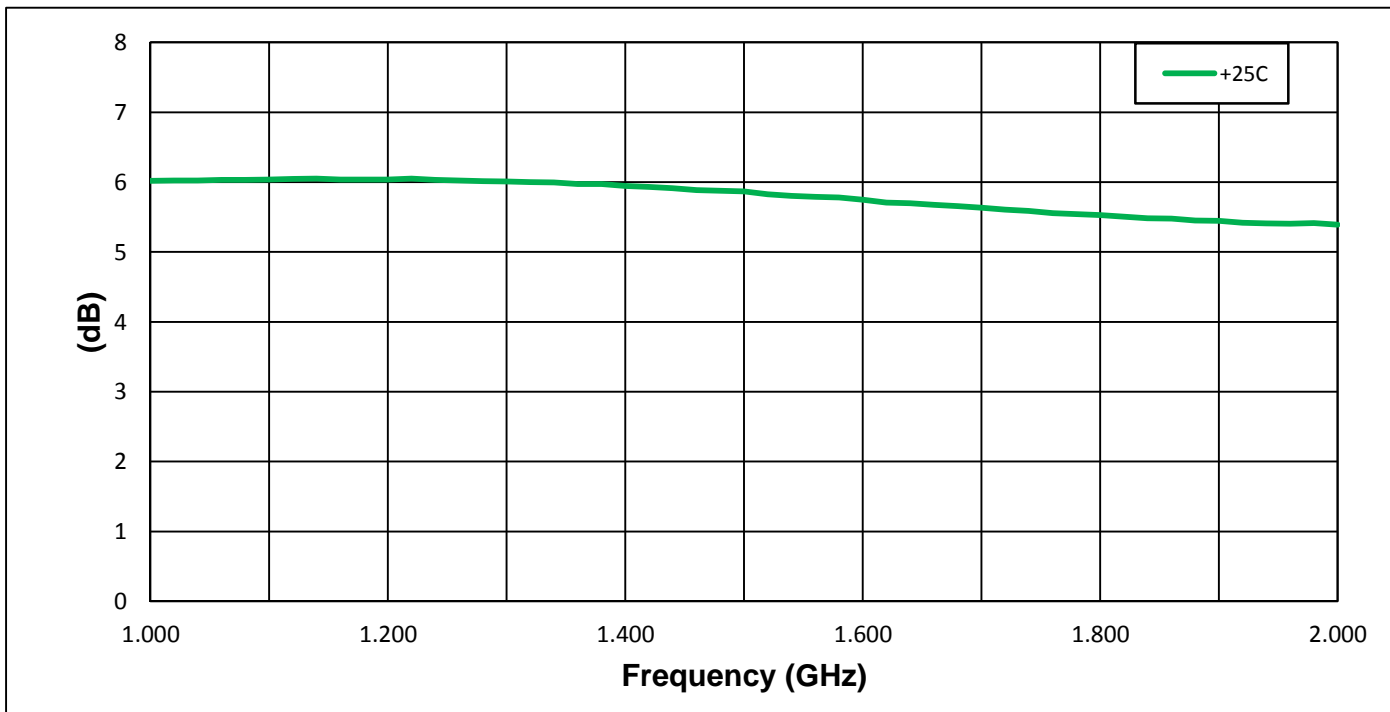
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Return Loss

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Noise (1-2 GHz)





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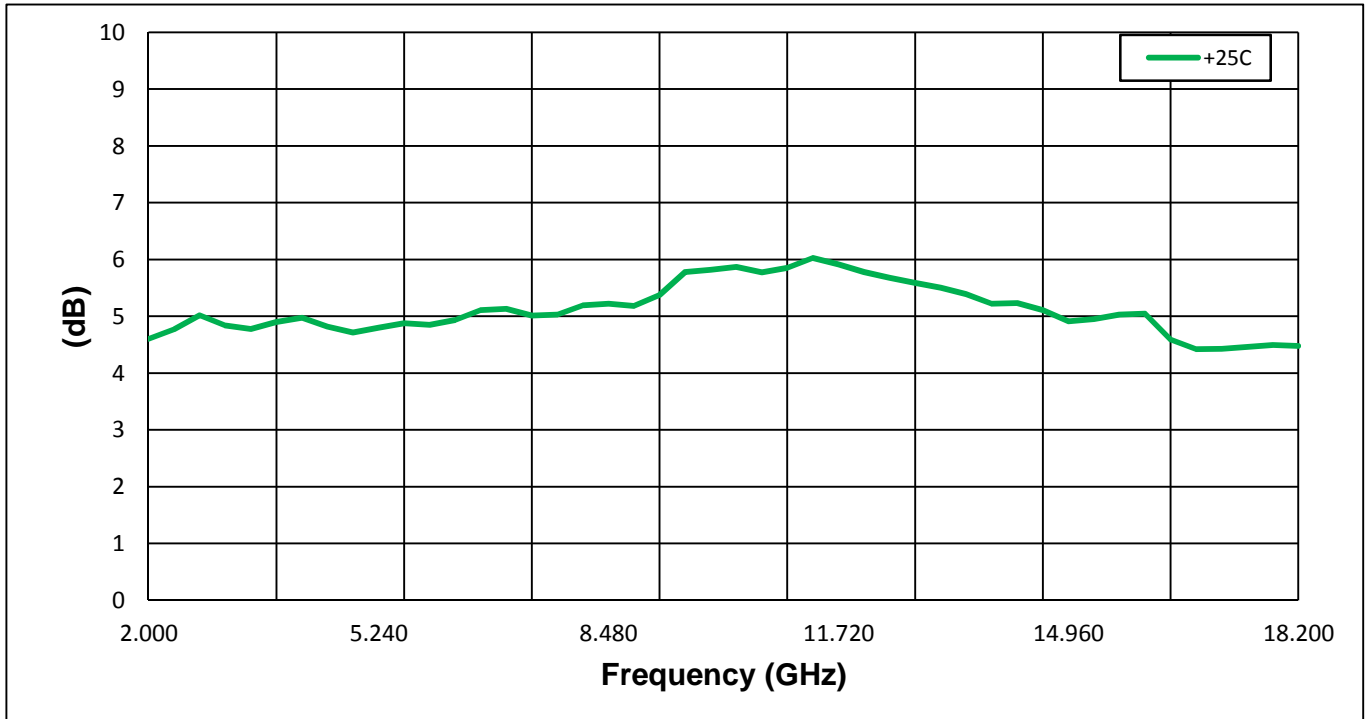
Broadband Frequency Operation

DATA PLOTS

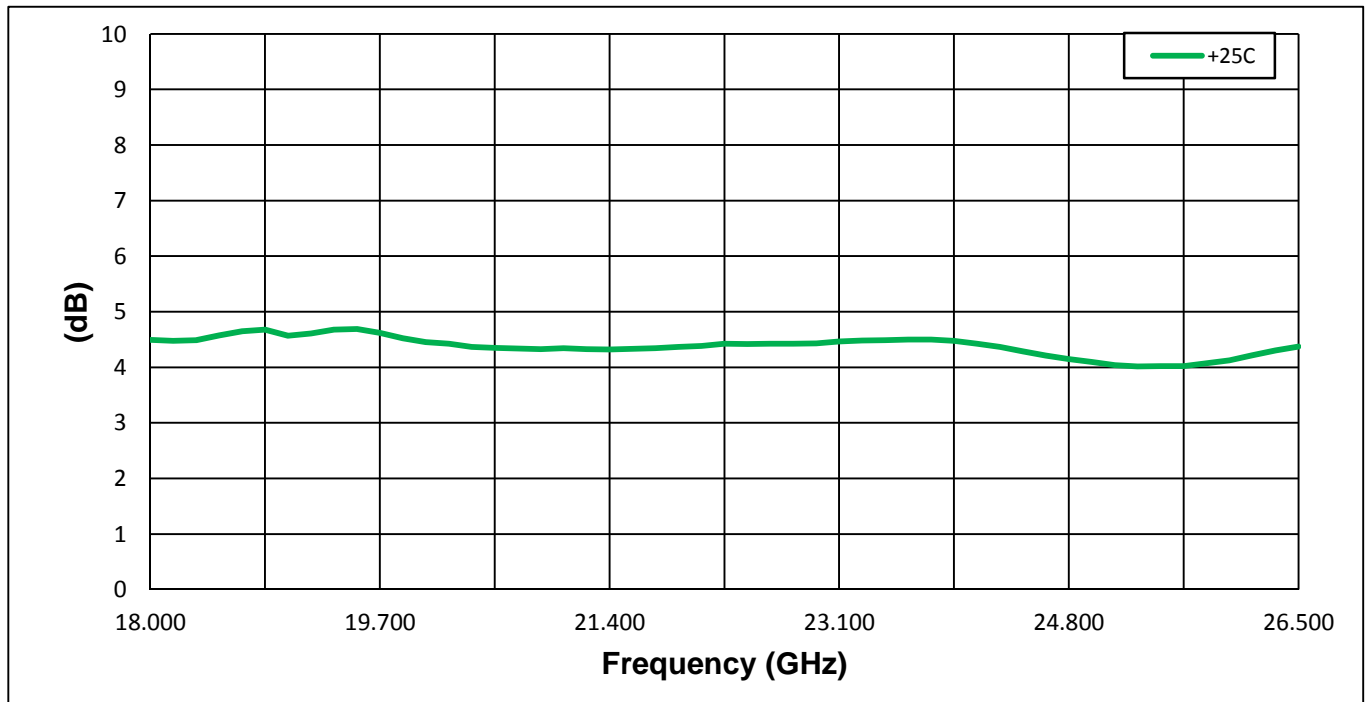
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Noise (2-18 GHz)



Noise (18-26.5 GHz)





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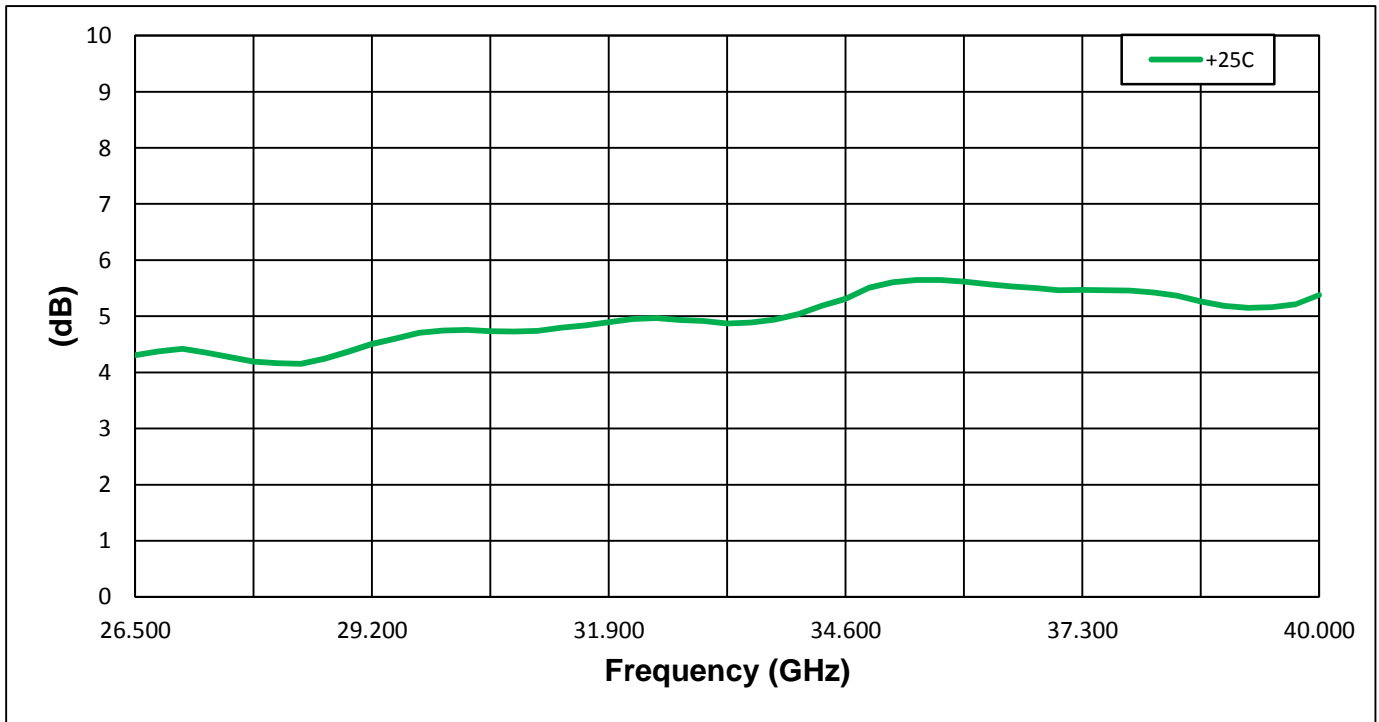
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Noise (26.5-40 GHz)



Noise (40-50 GHz)

