



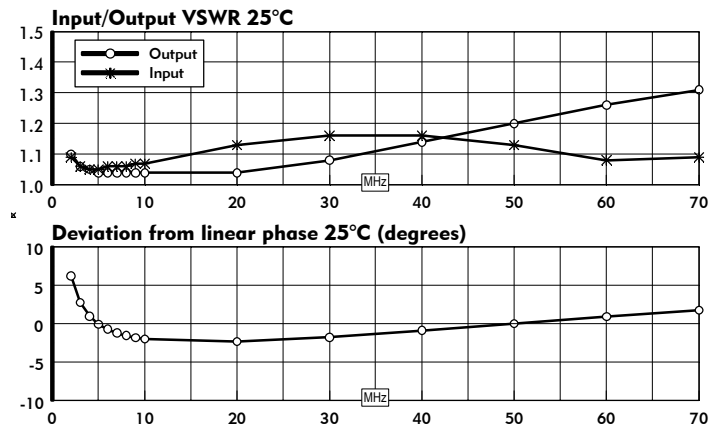
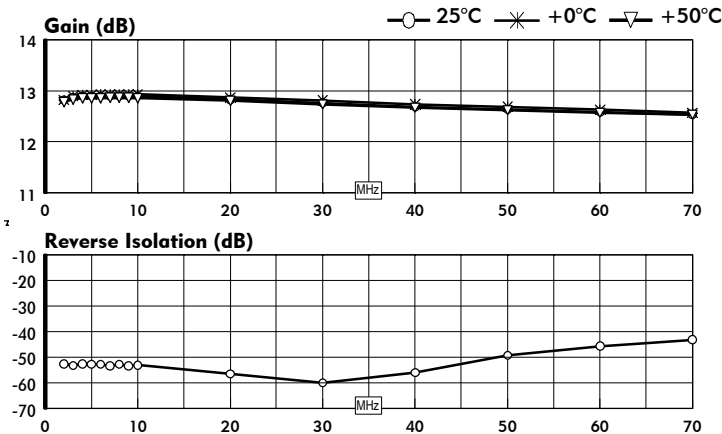
2 - 70 MHz Wireless Amplifier

QBS-101

- **2-70 MHz bandwidth**
- **Very high intercept points**
- **Low noise figure**
- **Low gain with high reverse isolation**

Parameters	Guaranteed	Guaranteed	Units
	25°C	+0 to +50°C	
Frequency range	2 - 70		MHz
Small signal gain	12.5 ± 0.7		dB
Gain vs. temperature		+0.7/-0.7	dB Max
Gain flatness	0.8	1.0	dB Max p-p
Reverse isolation	44	42	dB Min
VSWR Input	1.5:1	1.5:1	Max
Output	1.5:1	1.5:1	Max
1 dB compression	+23	+23	dBm Min
Output intercept point			
3rd Order	+58	+56	dBm Min
2nd Order	+93	+92	dBm Min
Noise figure	4.0	4.3	dB Max
DC supply voltage*	24		Vdc
DC supply current	350	370	mA Max
Gain vs. Vdc			dB/Volt Max
Package/Housing	19139 (E52-19139)		

*all specification ratings are based on DC supply voltage ± 1%



TYPICAL S-PARAMETER DATA

MHz	S11		S21		S12		S22	
	dB	Ang	dB	Ang	dB	Ang	dB	Ang
2	-27.5	-134.7	12.8	4.7	-52.6	10.5	-26.3	-73.4
5	-31.8	165.3	12.9	-10.7	-52.8	-12.9	-34.1	-20.7
7	-30.9	138.6	12.9	-17.9	-53.4	-15.4	-35.1	10.9
8	-30.2	128.6	12.9	-21.2	-52.8	-22.5	-35.2	21.4
10	-29.0	114.6	12.9	-27.7	-53.1	-26.3	-35.3	35.8
30	-22.8	57.4	12.8	-88.3	-60.5	-121.4	-29.6	71.3
40	-22.7	42.3	12.7	-117.8	-56.5	98.4	-24.4	72.1
60	-29.5	42.8	12.6	-176.7	-45.8	-18.3	-18.9	62.4
70	-28.3	118.9	12.5	153.8	-43.3	-60.4	-17.7	57.1

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+25.0 Vdc
Pulse (transient)	+27.0 Vdc
Temperature	
Operating	-55 to +71°C
Storage	-65 to +125°C
Maximum input drive	1.0 Vrms
Thermal rise, junction-to-case	+50°C

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