Data Sheet ADL8113

SPECIFICATIONS

200MHz TO 6GHz FREQUENCY RANGE

 $V_{DD1} = +5V, \, I_{DQ} = 110 \, \text{mA}, \, V_{SS2} = -3.3V, \, V_{DD2} = +3.3V, \, \text{and} \, \, T_{CASE} = 25^{\circ}C, \, \text{unless otherwise noted.}$

Table 2. 200MHz to 6GHz Frequency Range Specifications

Parameter	Test Conditions/Comments	Min	Тур	Max	Unit
OVERALL FUNCTION					
Frequency Range		0.200		6	GHz
INTERNAL AMPLIFIER MODE					
Small Signal Gain		12.0	14.0		dB
Gain Flatness			±0.25		dB
S11			15		dB
S22			17		dB
OP1dB		18.5	20.5		dBm
OIP3	Measurement taken at P _{OUT} per tone = 5dBm		35.5		dBm
OIP2	Measurement taken at P _{OUT} per tone = 5dBm		41.7		dBm
Noise Figure			3.8		dB
NTERNAL BYPASS SWITCH MODE		1			
Insertion Loss			2.2		dB
S11			21		dB
S22			23		dB
IIP3	Measurement taken at P _{IN} per tone = 14dBm		50		dBm
IP0.1dB			27.5		dBm
IP1dB			28		dBm
EXTERNAL BYPASS A MODE					
Insertion Loss	RFIN to OUT_A or IN_A to RFOUT		1.2		dB
S11	Looking into RFIN		23.5		dB
	Looking into IN_A		23.5		dB
	Looking into IN_B		1.5		dB
S22	Looking into RFOUT		25		dB
	Looking into OUT_A		25		dB
	Looking into OUT_B		1.5		dB
IP0.1dB	Looking into RFIN to OUT_A or IN_A to RFOUT		27.5		dBm
IP1dB	Looking into RFIN to OUT_A or IN_A to RFOUT		28		dBm
IIP3	Looking into RFIN to OUT_A or IN_A to RFOUT; measurement taken at P _{IN} per tone = 14dBm		50		dBm
EXTERNAL BYPASS B MODE					
Insertion Loss	RFIN to OUT_B or IN_B to RFOUT		1.2		dB
S11	Looking into RFIN		23.5		dB
	Looking into IN_A		1.5		dB
	Looking into IN_B		23.5		dB
S22	Looking into RFOUT		25		dB
	Looking into OUT_A		1.5		dB
	Looking into OUT_B		25		dB
IP0.1dB	RFIN to OUT_B or IN_B to RFOUT		27.5		dBm
IP1dB	RFIN to OUT_B or IN_B to RFOUT		28		dBm

analog.com Rev. 0 | 5 of 37

Data Sheet ADL8113

SPECIFICATIONS

Table 2. 200MHz to 6GHz Frequency Range Specifications (Continued)

Parameter	Test Conditions/Comments	Min	Тур	Max	Unit
IIP3	Looking into RFIN to OUT_B or IN_B to RFOUT; measurement taken at P _{IN} per tone = 14dBm		50		dBm