SPECIFICATIONS

0.01GHz TO 200MHz FREQUENCY RANGE

Amplifier drain bias voltage (V_{DD1}) = +5V, quiescent drain supply current (I_{DQ}) = 110mA, switch negative bias voltage (V_{SS2}) = −3.3V, switch positive supply voltage (V_{DD2}) = +3.3V, and T_{CASE} = 25°C, unless otherwise noted.

Table 1. 0.01GHz to 200MHz Frequency Range Specifications

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
OVERALL FUNCTION					
Frequency Range		0.01		200	MHz
INTERNAL AMPLIFIER MODE					
Small Signal Gain		12.5	14.5		dB
Gain Flatness			±0.5		dB
Input Return Loss (S11)			12.4		dB
Output Return Loss (S22)			11.5		dB
Output 1dB Compression (OP1dB)		17.5	19.5		dBm
Output Third-Order Intercept (OIP3)	Measurement taken at output power (P_{OUT}) per tone = 5dBm		37.7		dBm
Output Second-Order Intercept (OIP2)	Measurement taken at P_{OUT} per tone = 5dBm		48.2		dBm
Noise Figure			7		dB
INTERNAL BYPASS SWITCH MODE					
Insertion Loss			1.8		dB
S11			19		dB
S22			19		dB
Input P1dB Compression (IP1dB)			28		dBm
Input P0.1dB Compression (IP0.1dB)			27.5		dBm
Input Third-Order Intercept (IIP3)	Measurement taken at input power (P_{IN}) per tone = 14dBm		50		dBm
EXTERNAL BYPASS A MODE					
Insertion Loss	RFIN to OUT_A or IN_A to RFOUT		0.9		dB
S11	Looking into RFIN		24		dB
	Looking into IN_A		24		dB
	Looking into IN_B		1		dB
S22	Looking into RFOUT		24		dB
	Looking into OUT_A		24		dB
	Looking into OUT_B		1		dB
IP1dB	RFIN to OUT_A or IN_A to RFOUT		28		dBm
IP0.1dB	RFIN to OUT_A or IN_A to RFOUT		27.5		dBm
IIP3	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		0.9		dB
S11	Looking into RFIN		24		dB
	Looking into IN_A		1		dB
	Looking into IN_B		24		dB
S22	Looking into RFOUT		24		dB
	Looking into OUT_A		1		dB
	Looking into OUT_B		24		dB
IP1dB	RFIN to OUT_B or IN_B to RFOUT		28		dBm
IP0.1dB	RFIN to OUT_B or IN_B to RFOUT		27.5		dBm

SPECIFICATIONS

Table 1. 0.01GHz to 200MHz Frequency Range Specifications (Continued)

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