

## SPECIFICATIONS

## 6GHz TO 9GHz FREQUENCY RANGE

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

Table 3. 6GHz to 9GHz Frequency Range Specifications

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
OVERALL FUNCTION					
Frequency Range		6		9	GHz
INTERNAL AMPLIFIER MODE					
Small Signal Gain		11.9	13.9		dB
Gain Flatness			$\pm 0.1$		dB
S11			13.6		dB
S22			24		dB
OP1dB		16.8	18.8		dBm
OIP3	Measurement taken at $P_{OUT}$ per tone = 5dBm		31.7		dBm
OIP2	Measurement taken at $P_{OUT}$ per tone = 5dBm		41		dBm
Noise Figure			3.9		dB
INTERNAL BYPASS SWITCH MODE					
Insertion Loss			2.6		dB
S11			19.8		dB
S22			24.7		dB
IP1dB			28		dBm
IP0.1dB			27.5		dBm
IIP3	Measurement taken at $P_{IN}$ per tone = 14dBm		50		dBm
EXTERNAL BYPASS A MODE					
Insertion Loss	RFIN to OUT_A or IN_A to RFOUT		1.5		dB
S11	Looking into RFIN		22.7		dB
	Looking into IN_A		22.7		dB
	Looking into IN_B		2.5		dB
S22	Looking into RFOUT		25.5		dB
	Looking into OUT_A		25.5		dB
	Looking into OUT_B		2.5		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		1.5		dB
S11	Looking into RFIN		22.7		dB
	Looking into IN_A		2.5		dB
	Looking into IN_B		22.7		dB
S22	Looking into RFOUT		25.5		dB
	Looking into OUT_A		2.5		dB
	Looking into OUT_B		22.7		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 3. 6GHz to 9GHz 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