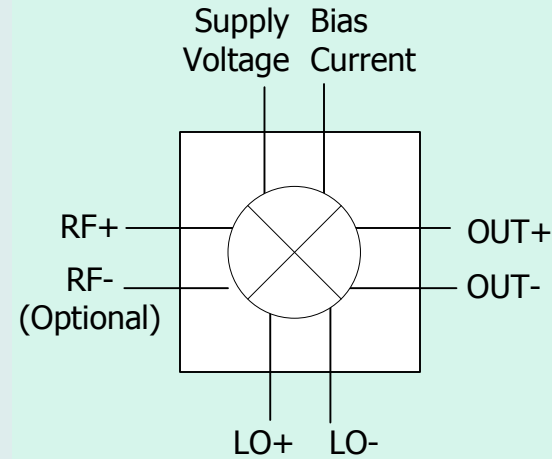


Product Summary

The SN055 is a fully balanced Gilbert gain cell with single/differential RF inputs and differential outputs. It is designed for down-conversion in a receiver and can also be used as an up converter. The mixer has very low current consumption and can operate at low voltages (as low as 1.2V). The external bias current sets the current consumption of the mixer and can support a range of power consumption as needed. Designed on a 0.18um CMOS process and measures 0.16mm x 0.15mm



Performance Summary

	Min	Typical	Max	Notes
Supply Voltage (V)	1.2		1.8	
Conversion Gain (dB)		-6		LO @ 914MHz, RF @1014MHz, LO amplitude=300mV, RF input single ended
Output Noise @100MHz (nV/sqrt(Hz))		6.65		LO amplitude=300mV
1db Compression Point (dBm)		2		LO amplitude=300m
LO port to RF port isolation (dB)		>100		LO amplitude=300mV, @914MHz
LO port to IF port isolation (dB)		42		LO amplitude=300mV, @914MHz
Operating Temperature (C)	-40	25	85	
Current Consumption (uA)		230		
Operating Frequency (MHz)	100		1500	

Deliverables

- GDSII Layout
- Footprint (LEF)
- Spice Netlist/ Schematics
- Detailed Technical Data
- Silicon Samples