

**FEATURES**

RF Frequency:	14 – 18 GHz
Input IP3:	+23 dBm
Sideband Suppression:	-27 dBc
LO Leakage:	-33 dBm
LO Power:	+15 dBm
Size:	1.5" X 1.5" [3.8 cm X 3.8 cm]

**DESCRIPTION**

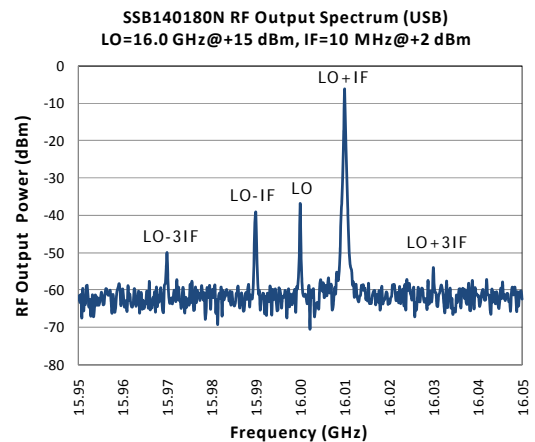
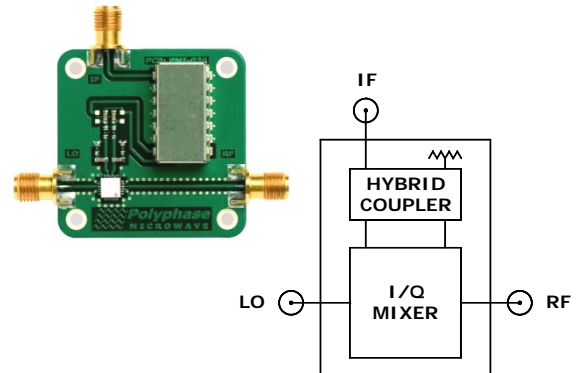
The SSB140180N is a single-sideband modulator optimized for linear modulation of an RF carrier (LO). The IF input is upconverted to the desired RF sideband while the unwanted RF sideband is internally suppressed.

The SSB140180N maintains excellent sideband suppression across multi-octave IF frequency bandwidths.

In-stock IF bands include:

- 10 MHz to 50 MHz
- 30 MHz to 90 MHz

Other common IF bands are available. Please specify desired sideband (LSB/USB) and IF band when ordering.

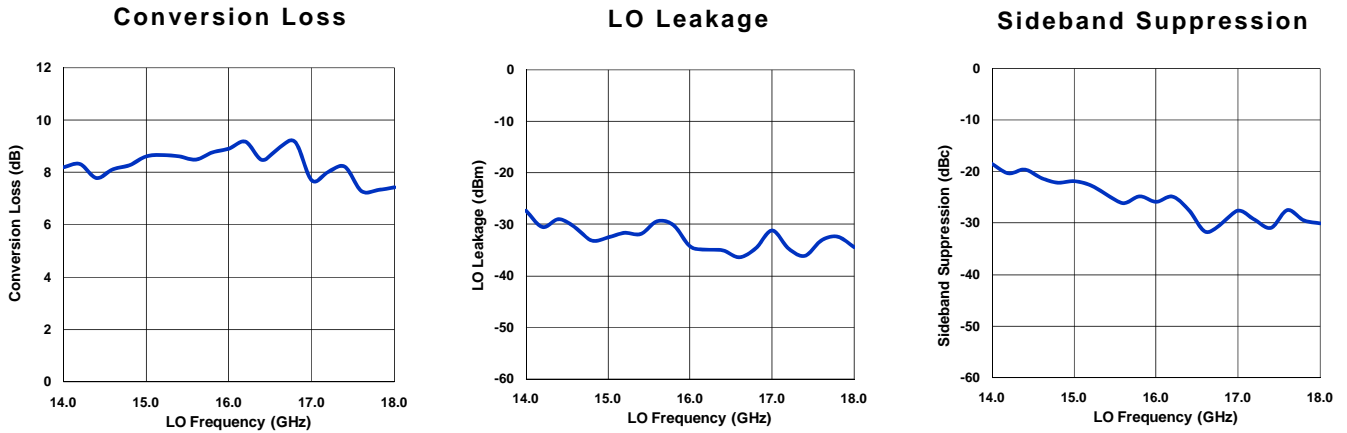

**ELECTRICAL SPECIFICATIONS**

Test Conditions: +25°C, RF Input (LO) = +15 dBm, IF input = 0 dBm @ 30 MHz unless otherwise noted.

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
RF Frequency Range		14		18	GHz
RF Input (LO) Power		+14	+15	+17	dBm
RF Input (LO) VSWR			2:1		Ratio
RF Output VSWR			2.5:1		Ratio
IF Input Impedance			50		$\Omega$
Conversion Loss			8.5	10.5	dB
Input IP3	2-Tone, $\Delta f = 1$ MHz		+23		dBm
Input P1dB			+14		dBm
RF Carrier (LO) Leakage at RF Output	No IF input		-33	-23	dBm
RF-IF Isolation	No IF input		55		dB
Sideband Suppression	Over IF Frequency Band		-27	-18	dBc
Operating Temperature Range		-40		+85	$^{\circ}$ C
RF/IF Input Power w/o Damage				+20	dBm

**TYPICAL PERFORMANCE CHARACTERISTICS**

Standard Test Conditions: +25°C, RF (LO) Input = +15 dBm, RF Input = 0 dBm @ LO+30 MHz.



**DIMENSION DRAWING**

