

Local Oscillator Doubler/Tripler 1000-1500 MHz

Model 310-027013-002

Typical Applications

- Synthesizer Building Block
- EW
- ELINT
- SIGINT



Features

- Low Spurious less than -67 dBc
- Fast 90 ns Switching Speed
- Programmable x2 and x3 Multiplication
- High Output +7 dBm drive Level
- 3 Programmable Outputs
- Null Output Mode
- All Aluminum Housing

General Description

The 310-027013-002 Multiplier provides the system designer with a compact, fast-switching building block for LO multiplication applications. A pair of internal solid-state multipliers provides frequency multiplication by a factor of 2 or 3 depending on the state of the two band controls.

Four selective internal bandpass filters offers superior spurious response. Operating band is selected using two band select control pins. Solid State PIN Diode switches provide high-speed selection of the desired operating band. An internal 3-way output switch allows routing of the multiplied input LO signal to other modules based upon the state of the output control lines. A NULL mode is also available to disable the module's output.

Typical Performance

Parameter	Typical Specifications
Input Frequency	1000 to 1500 MHz
Input Level	+7.5 dBm $\pm$ 2 dB
Output Frequency	2.0 to 4.5 GHz
Output Level	+5 dBm $\pm$ 1.5 dB
Switching Speed	90 ns
VSWR (Input)	1.5:1
Phase Noise Degradation	7 dB (x2 mode) / 11 dB (x3 mode)
DC Power	+5 volts / 200 mA -5 volts / 2 mA
Temperature	0 to +75 °C

All specifications above measured at +25 °C