Local Oscillator x21 Multiplier 100 MHz

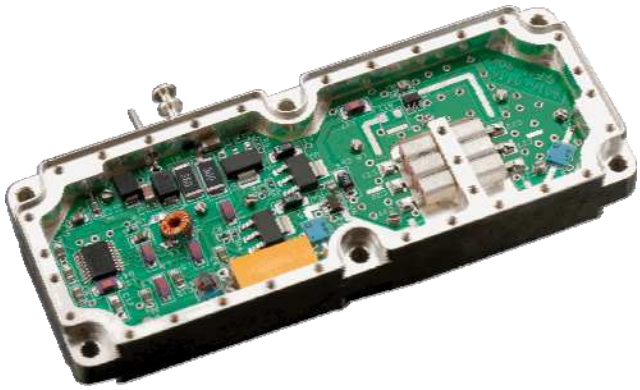
Model 310-027023-003

Typical Applications

- Synthesizer Building Block
- EW
- ELINT
- SIGINT

Features

- Low Spurious less than -60 dBc
- Superior Phase Noise: -130 dBc/Hz @ 10 kHz
- Buffered Input
- High Output +17 dBm drive Level
- Integral Voltage Regulator
- Conduction Cooled
- Lightweight Aluminum Housing



General Description

The 310-027023-003 Multiplier is a x21 design providing the system designer with a compact, low phase noise building block for reference oscillator multiplication applications. A linear amplifier drives a step recovery diode thereby multiplying an input 100 MHz clock signal by a factor of 21.

A pair of selective 3-pole internal bandpass filters along with a pair of linear driver amplifiers help to deliver low spurious response. The unit exhibits very little degradation of input reference signals, multiplying to the desired output frequency while degrading the input phase noise performance by only 28 dB.

Typical Performance

Parameter	Typical Specifications
Input Frequency	100 MHz
Input Level	+10 dBm ± 0.1 dB
Output Frequency	2100 MHz
Output Level	+17 dBm ± 2 dB
Spurious	-60 dBc
VSWR	2.0:1
Phase Noise Degradation	1.7 dB (above ideal)
DC Power	+12 volts / 500 mA
Temperature	-40 °C to +85 °C

All specifications above measured at +25 °C

ISO 9001 CERTIFIED

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