## Frequency Multiplier (x2 to x48)



## Features

- Fully Customizable Housing
- Fast 90 nsec Switching Speed
- High Output +10 dBm Drive Level
- 2 Programmable Outputs
- Null Output Mode
- x2 through x48 Multiplication


## Description

This Multiplier provides the system designer with a compact, fast-switching building block for LO multiplication applications. An internal solid-state multiplier provides frequency multiplication by your choice of a factor of $2,4,8$, or up to 48 , all from a single input frequency.

The multiplier is designed for airborne applications and has field-replaceable RF connectors. The entire assembly is designed to be slid into a channel for systems installation without the need to solder wires or screw on connectors.

This design incorporates single-stage active doublers, amplifiers, SRD multipliers, power splitters, bandpass filtering, voltage conditioning, and BIT circuits and provides excellent phase noise performance.

## Applications

- Synthesizer Building Block
- SIGINT
- ELINT
-EW


## Typical Specifications

| Input Frequency | 200 to 225 MHz |
| :--- | :--- |
| Input Level | $\mathbf{+ 1 0 \mathrm { dBm }}$ |
| Output Frequency | 400 MHz to 10.8 GHz |
| Output Level | +10 dBm |
| Bandwidth | $2 \%$ |
| Switching Speed | 90 nsec |
| Harmonics | -60 dBc |
| DC Power | $+28 \mathrm{~V} @ 275 \mathrm{~mA}$ |
|  | $+15 \mathrm{~V} @ 75 \mathrm{~mA}$ |
| Temp Range | $0^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}$ |

All specifications above measured at $25^{\circ} \mathrm{C}$

## Dimensions and Connections

$12 " L \times 13 " W \times 1 " H$
Revision 7/5/2012

