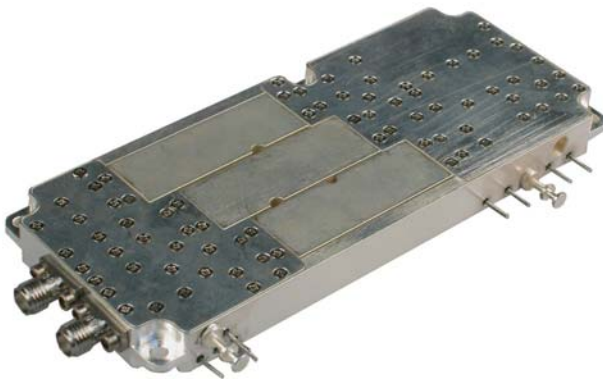


# Local Oscillator Doubler 4500-9000 MHz

## Model 310-027004-006

### Typical Applications

- Synthesizer Building Block
- EW
- ELINT
- SIGINT



### Features

- Low Spurious less than -60 dBc
- Fast 120 ns switching speed
- High Output +7 dBm drive Level
- 3-Band Functionality
- Null Output Mode
- All Aluminum Housing

### General Description

The 310-027004-006 Doubler provides the system designer with a compact, fast-switching building block for LO multiplication applications. An internal solid-state multiplier provides frequency multiplication by a factor of 2.

Three 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 2-port isolator maintains the output VSWR over the wide operating frequency range. A NULL mode is also available to disable the module's output.

### Typical Performance

| Parameter               | Typical Specifications                |
|-------------------------|---------------------------------------|
| Input Frequency         | 4500 to 9000 MHz                      |
| Input Level             | +10 dBm $\pm$ 2 dB                    |
| Output Frequency        | 9.0 to 18.0 GHz                       |
| Output Level            | +7 dBm $\pm$ 2 dB                     |
| Switching Speed         | 120 ns                                |
| VSWR (Input)            | 1.5:1                                 |
| Phase Noise Degradation | 7 dB                                  |
| DC Power                | +5 volts / 180 mA<br>-5 volts / 45 mA |
| Temperature             | 0 to +75 °C                           |

All specifications above measured at +25 °C