

#### • FEATURES

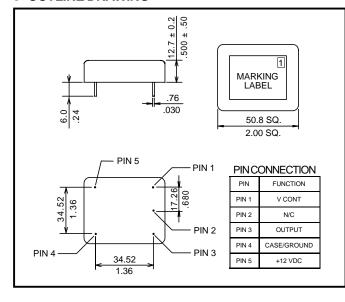
- PLL DESIGN
- TOLERANCE AND STABILITY TO ± 10 PPM
- CUSTOM SPECIFICATIONS AVAILABLE

# SERIES VH6131 2488.32 MHz

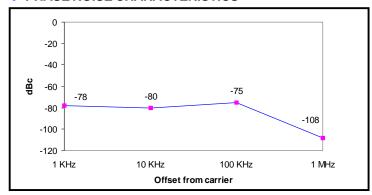
## SPECIFICATIONS

| NOMINAL FREQUENCY   | 2488.32 MHz   |  |  |  |
|---|---|--|--|--|
| FREQUENCY STABILITY OVER TEMPERATURE RANGE (REFERENCED TO 25°C) | ±25 PPM MAX OVER 0°C TO +70°C AT VC = +2.5 VDC AND STANDARD LOAD  |  |  |  |
| OPERATING TEMPERATURE RANGE                                     | 0°C TO +70°C  |  |  |  |
| STORAGE TEMPERATURE RANGE                                       | -40°C TO +85°C  |  |  |  |
| AGING CHARACTERISTICS   | ±5.0 PPM MAX FOR THE FIRST YEAR AND ±10 PPM MAX FOR 10 YEARS  |  |  |  |
| OUTPUT WAVEFORM   | SINEWAVE<br>OUTPUT LEVEL: 0 dBm<br>HARMONIC SUPPRESSION: -10 dBc TYPICAL<br>REFERENCE SUPPRESSION: -50 dBc MIN AT ±9.72 MHz AWAY FROM CARRIER |  |  |  |
| LOAD  | 50 OHMS   |  |  |  |
| FREQUENCY STABILITY OVER LOAD VARIATION                         | ±3.0 PPM MAX FOR 10% VARIATION AT VC = +2.5 VDC, VCC = +12.0 VDC AT 25°C  |  |  |  |
| SUPPLY VOLTAGE  | +7.0 TO +12.0 VDC ±5%   |  |  |  |
| FREQUENCY STABILITY OVER SUPPLY VOLTAGE VARIATION               | $\pm 1.0$ PPM MAX FOR 5% VARIATION AT VC = $\pm 2.5$ VDC AND STANDARD LOAD AT 25°C  |  |  |  |
| SUPPLY CURRENT  | 100 mA MAX AT VC = +2.5 VDC, VCC = +12.0 VDC AND STANDARD LOAD AT 25°C  |  |  |  |
| FREQUENCY ADJUSTMENT  | $\pm 50$ PPM MIN OVER CONTROL VOLTAGE RANGE AT VCC = $\pm 5.0$ V AND STANDARD LOAD AT 25°C  |  |  |  |
| NOMINAL CONTROL VOLTAGE (VC)                                    | +2.5 VDC  |  |  |  |
| SETTABILITY AT Vfo†   | +2.5 VDC ±0.5 VDC   |  |  |  |
| CONTROL VOLTAGE RANGE   | +0.5 TO +4.5 VDC  |  |  |  |
| LINEARITY   | ±15 % MAX OF BEST STRAIGHT LINE FIT   |  |  |  |
| SLOPE   | POSITIVE  |  |  |  |
| MODULATION FREQUENCY BANDWIDTH                                  | 10 KHz (-3dB) MIN   |  |  |  |
| INPUT IMPEDANCE   | 50 KOHM MIN   |  |  |  |
| PHASE NOISE (TYPICAL)   | SEE GRAPH OF PHASE NOISE CHARACTERISTICS  |  |  |  |

## OUTLINE DRAWING



## PHASE NOISE CHARACTERISTICS



### PART NUMBERING SYSTEM

| SERIES  |   | TEMPERATURE<br>CODE |   | FREQUENCY<br>ADJUSTMENT | FREQUENCY   |
|---------|---|---------------------|---|-------------------------|-------------|
| VH6131* | - | LZ                  | • | 30                      | 2488.32 MHz |

EXAMPLE: VH6131\*-LZ-30-2488.32 MHz