

# TK961 – VOLTAGE CONTROLLED CRYSTAL OSCILLATOR

## TECHNICAL FEATURE

### FEATURES

- Low Operating Power
- Non-ovenized Design
- Wide Frequency Deviation



## PERFORMANCE

Output frequency .....	390 MHz
Frequency Deviation.....	+50 KHz
Linear Distortion .....	<1% <sub>c</sub>
Sub-Harmonics .....	-65 dBc
<3 ppm Stability from .....	-40°C to +85° C
Short Term Stability .....	6E-10/sec
Dimensions.....	2" x 1.5" x 4"

## DESCRIPTION

The unit incorporates a unique design that combines the frequency deviation of voltage controlled crystal oscillator with the stability of a temperature compensated crystal oscillator. Designed for use in a flightline environment, this oscillator combines unique features to meet demanding performance specifications.

Frequency tuning deviation is  $> \pm 50$  KHz with the error from the best straight line  $<1\%$ . This is achieved with careful balancing of component parameters and alignment techniques.

Using frequency multiplication the output frequency is 390 MHz and exhibits short-term stability and phase noise equal to many fixed oscillators. This device can be customized to meet particular systems needs and requirements.

## TYPICAL PHASE NOISE

