

# TK970 - LOW NOISE CRYSTAL OSCILLATOR

## TECHNICAL FEATURE

### FEATURES

- Fifth overtone SC cut crystal
- Integral Crystal Filter
- High Output Power +24 dBm
- Low Phase Noise
- Internal Vibration Isolation System



### PERFORMANCE

Frequency .....	120 MHz nom
Phase Noise (>50 kHz offset).....	<-175 dBc/Hz
Output Power .....	+24 dBm nom
Harmonics .....	<-40 dBc
Operating Temperature .....	-55 to +85° C

### DESCRIPTION

The TK970 crystal oscillator is designed to operate in a dynamic vibration environment while maintaining low phase noise on its output. The oscillator utilizes fifth overtone SC cut crystal as the heart of the oscillator circuit. This provides the frequency stability and good aging performance of this non-ovenized oscillator.

Incorporating a vibration isolation system and a narrow band crystal filter, the oscillator maintains excellent phase noise and frequency stability in a severe vibration environment.

This unit was designed for use as a low noise frequency reference for radar applications.

### TYPICAL PHASE NOISE

