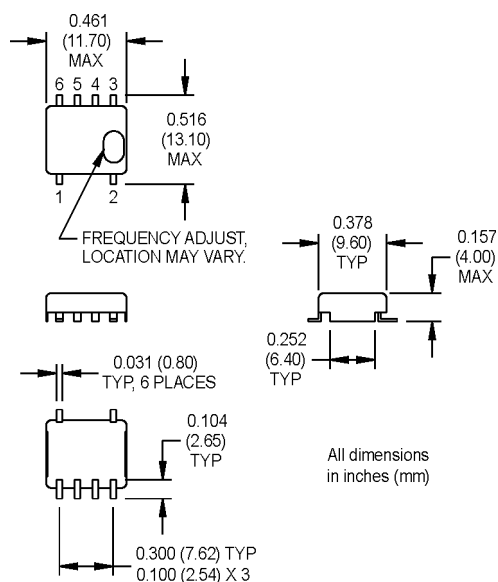


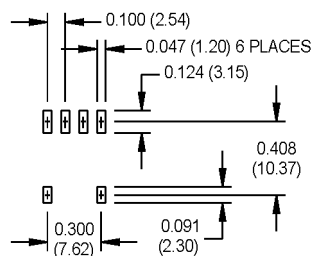
# MTCVO11/21 Series Surface Mount Temperature Compensated Voltage Controlled Crystal Oscillators (TCVCXO)



Small size, high precision TCVCXO available in standard frequencies for telecommunications and other RF applications requiring clipped sinewave output with low power consumption. Operating voltage of 3 V or 5 V available.



## SUGGESTED SOLDER PAD LAYOUT



## Pin Connections

PIN	FUNCTION
1	Ground
2	Ground
3	Output
4	Ground
5	Control Voltage
6	+Vcc

MODEL NO.	SPECIFICATIONS
MTCVO-11A5	-15°C to +55°C, ±2.5 ppm, V <sub>cc</sub> = 5.0 V ±5%
MTCVO-11A3	-15°C to +55°C, ±2.5 ppm, V <sub>cc</sub> = 3.0 V ±5%
MTCVO-21A5	-30°C to +75°C, ±2.5 ppm, V <sub>cc</sub> = 5.0 V ±5%
MTCVO-21A3	-30°C to +75°C, ±2.5 ppm, V <sub>cc</sub> = 3.0 V ±5%

## Electrical Specifications

PARAMETERS	VALUE	
Frequency Range	12.000 to 20.000 MHz	
Stability	±2.5 ppm	
Stability with ±5% V <sub>cc</sub> Change	±0.5 ppm	
Aging	±1 ppm/yr. Max.	
Operating Temperature	-15°C to +55°C or -30°C to +75°C	
Storage Temperature	-40°C to +85°C	
Supply Voltage	5.0 V ±5%	3.0 V ±5%
Supply Current	3 mA Max.	
Output (Clipped Sinewave)*	1.0 V p-p Min.	0.7 V p-p Min.
Frequency Adjustment (Int. Trimmer)	±3 ppm Min.	
Control Range	±5 ppm Min.	±5 ppm Min.
Control Voltage	2.5 V ±2.0 V	1.5 V ±1.0 V

\* Load of 10K Ω in parallel with 10 pF. See load circuit diagram #7 on page 137. See page 136, Figure "3" for suggested solder profile.

M-tron reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of such product.

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