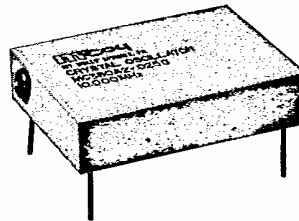
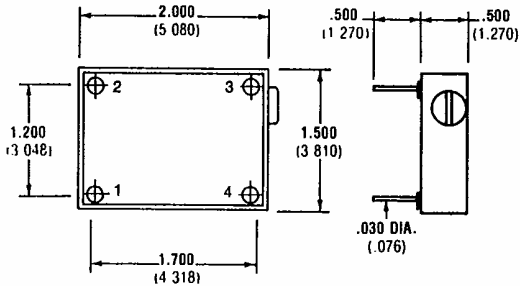


## MODEL MC380A2 TCXO

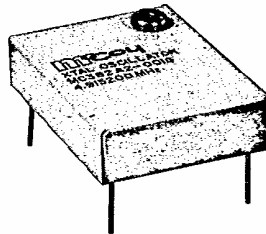
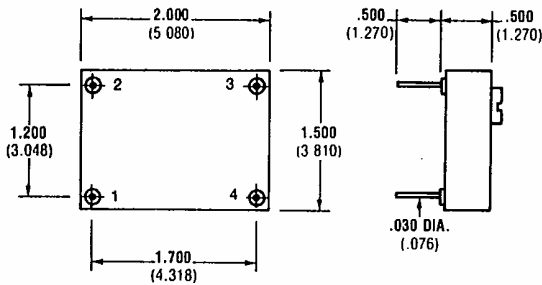


- Pin Connections**
1. R.F. Output
  2. Common and Case
  3. Common and Case
  4. Oscillator B+

### SPECIFICATIONS

**Frequency Range:** 187.5 KHz to 25 MHz  
**Frequency Stability:**  $\pm 0.5$  PPM  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$   
 $\pm 1.0$  PPM  $-10^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 $\pm 2.0$  PPM  $-30^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 $\pm 5.0$  PPM  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$   
**Input Voltage:**  $+5.0\text{V DC} \pm 1\%$   
**Input Current:** 20 to 50 ma. Depending on Frequency  
**Output:** TTL/DTL Compatible  
**External Trim:** 5 PPM, Minimum  
**Aging:** 1 PPM/Year Maximum

## MODEL MC382A2 TCXO

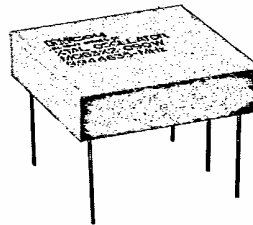
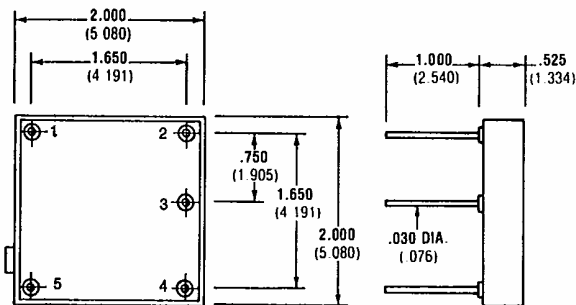


- Pin Connections**
1. R.F. Output
  2. Common and Case
  3. Common and Case
  4. Oscillator B+

### SPECIFICATIONS

**Frequency Range:** 187.5 KHz to 25 MHz  
**Frequency Stability:**  $\pm 0.5$  PPM  $0^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$   
 $\pm 1.0$  PPM  $-10^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 $\pm 2.0$  PPM  $-30^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 $\pm 5.0$  PPM  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$   
**Input Voltage:**  $+5.0\text{V DC} \pm 1\%$   
**Input Current:** 20 to 50 ma. Depending on Frequency  
**Output:** TTL/DTL Compatible  
**Trim:**  $\pm 5$  PPM Minimum  
**Aging:** 1 PPM/Year Maximum

## MODEL MC163X2 TCXO



- | Sine Wave              | TTL                    | CMOS                   | ECL                    |
|------------------------|------------------------|------------------------|------------------------|
| <b>Pin Connections</b> | <b>Pin Connections</b> | <b>Pin Connections</b> | <b>Pin Connections</b> |
| 1. Oscillator B+       | 1. Oscillator B+       | 1. Oscillator B+       | 1. OSC B+ or B-        |
| 2. N.C.                | 2. Common and Case     | 2. N.C.                | 2. GND                 |
| 3. R.F. Output         | 3. R.F. Output         | 3. R.F. Output (CMOS)  | 3. R.F. Output         |
| 4. Common and Case     | 4. Logic B+            | 4. Common and Case     | 4. Logic -5.2 VDC      |
| 5. Common and Case     | 5. Common and Case     | 5. Common and Case     | 5. GND                 |

### SPECIFICATIONS

**Frequency Range:** 180 Hz to 150 MHz (depending upon output)  
**Stability Tr:**  $\pm 0.5$  PPM  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$   
 $\pm 1.0$  PPM  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
 $\pm 5.0$  PPM  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$   
 (Shown are typical specifications - this is a cost determining requirement and only actual needs should be specified)  
**Input Voltage Range:**  $+12\text{V DC}$  to  $+24\text{V DC} \pm 3\%$  and  $+5\text{V DC} \pm 5\%$  (TTL/DTL units only)  
**External Trim:** 5 PPM Minimum  
**Aging:** 1 PPM/Year Maximum

#### Output:

| Sine Wave  |                                  |
|--|----------------------------------|
| Freq Range 3-150 MHz<br>Output 1-10 MW 50 ohms<br>Harmonics/<br>Sub-Harmonics -20 dB Minimum |                                  |
| TTL/DTL  | CMOS                             |
| 187.5 KHz-25 MHz<br>TTL/DTL Compatible   | 180 Hz-10 MHz<br>CMOS Compatible |

### ECL SPECIFICATIONS

**Frequency Range:** 50 to 100 MHz  
**Input Voltage:**  $\pm 12$  to  $24\text{V DC} \pm 3\%$   
 and  $-5.2\text{V DC} \pm 5\%$   
**Output:** ECL Compatible