

# Ultra Miniature TCXOs

## OSC Series

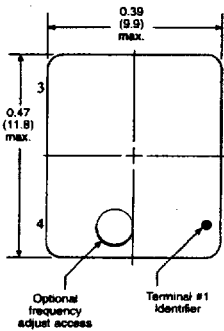


### Features

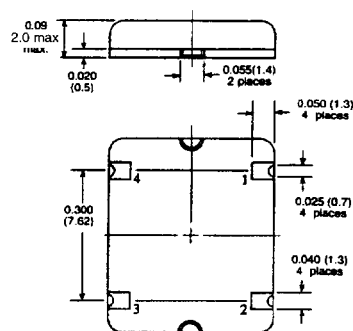
- 3.0 or 5.0 Vdc option
- Tape and reel
- Reflow solderable
- Low cost
- <2.2 mm tall
- Voltage tune option

### Ideal for

- Wireless handsets PCS, GSM, Cellular, GPS



inches  
(mm)



PIN 1 = VC or N/C  
PIN 2 = GROUND  
PIN 3 = OUTPUT  
PIN 4 = B+

\*OSC-3AO 10 MHz has been designated the model T-1115 and is a standard part available from stock in high quantity

## SPECIFICATIONS

Frequency range:	10MHz to 25 MHz	
Stability Options: (relative to +25°C)	<b>1</b> = ±1.5 ppm -20 to +70°C <b>2</b> = ±2.0 ppm -30 to +70°C <b>3</b> = ±2.5 ppm -30 to +75°C <b>4</b> = ±5.0 ppm -40 to +85°C	
Stability vs. Supply Aging: (typical)	<±0.3 ppm vs B+ of ±5% < 1.0 ppm/year at +40°C	
Input Voltage & current:	<b>A</b> = +5.0 Vdc ±5% <2.0 mA MAX. <b>B</b> = +3.0 Vdc ±5% <1.5 mA (10.0 to 16.8 MHz). <2.0 mA (16.8 to 20.0 MHz).	
Output: (Clipped Sinewave)	+5.0 Vdc = 1.0 VP-P minimum +3.0 Vdc = 0.7 VP-P minimum	
Load:	10 KΩ/10pf	
Mechanical trim:	+3.0 ppm minimum	
Trim options:	<b>0</b> = NO VCO mechanical trim <b>1</b> = ±5.0 ppm VC & mechanical <b>2</b> = Voltage trim only ±8 ppm min.	
Typical part number:	<b>OSC-3B2 19.2 MHz</b> <b>3</b> = ±2.5 ppm <b>B</b> = ±3.0 Vdc <b>2</b> = Voltage Tune no mechanical trimmer	
Standard Frequencies:	10.0, 12.8, 13.0, 14.4, 15.36, <i>Contact factory for other frequencies.</i> 16.0, 19.2, 19.68 and 20MHz	
Voltage Control Input Impedance	100KΩ minimum	
<u>Supply Voltage</u>	<u>Control Voltage Range</u>	<u>Frequency Tolerance at 25°C</u>
3.0 VDC	0.5V to 2.5V	±2.0 ppm at 1.5 Vdc
5.0 VDC	0.5V to 4.5V	±2.0 ppm at 2.5 Vdc
Start-up Time:	<10 msec (typical) to within ±1.0 ppm	
Harmonics:	2nd Harmonic > 3 dBc down 3rd Harmonic >10 dBc down Other >18 dBc down	
Phase Noise (typical <b>OSC-3B1</b> 14.4)	-80 dBc/Hz at 10 Hz offset -125 dBc/Hz at 100 Hz -145 dBc/Hz at 1 KHz -148 dBc/Hz at 10 KHz -150 dBc/Hz at 100 KHz	

### How to order

OSC -    /frequency

