

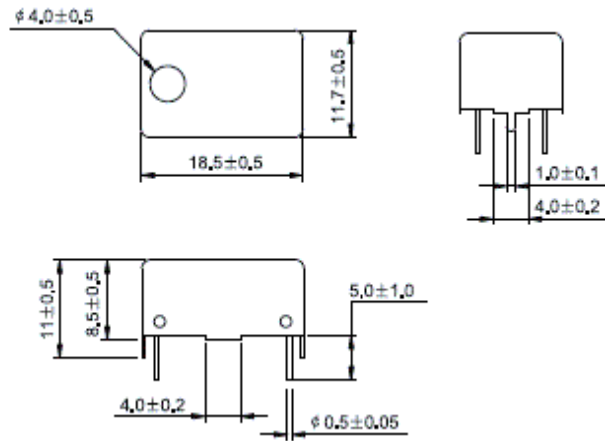
## CT18S VC / TCXO

18.5 x 11.7 x 11.0mm  
9.600MHz to 40.000MHz

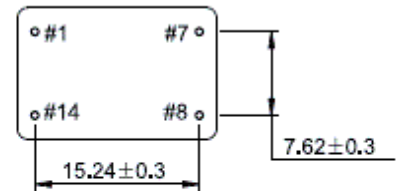
RoHS Compliant  
Clipped Sinewave  
3.3 or 5.0VDC  
VC Option on Pin 1

## Mechanical Dimensions

Dimensions are in millimeters



Land Pattern



PIN CONNECTION

# 1 V<sub>C</sub> or N<sub>C</sub>  
# 7 GND  
# 8 OUTPUT  
# 14 V<sub>DD</sub>

## Electrical Specifications

|                                                                                 |                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Range                                                                 | 9.600MHz To 40.000MHz                                                                                                                                                                                    |
| Frequency Deviation                                                             | ±5.0ppm or 10ppm minimum Over Control Voltage                                                                                                                                                            |
| Frequency Stability                                                             | Vs. Operating Temp Rang: See Part Numbering Guide<br>Vs. Input Voltage (±5%) : ± 0.3ppm Max<br>Vs. Load (±10%): ± 0.3ppm Max                                                                             |
| Supply Voltage                                                                  | 3.3VDC ± 5% or 5.0VDC ± 5%                                                                                                                                                                               |
| Output Voltage<br>Logic High (V <sub>OH</sub> )<br>Logic Low (V <sub>OL</sub> ) | 0.8Vp-p Min (V <sub>DD</sub> : 3.3V <sub>DC</sub> )<br>1.0Vp-p Min (V <sub>DD</sub> : 5.0V <sub>DC</sub> )                                                                                               |
| Load Drive Capability                                                           | 10kOhms//10pF                                                                                                                                                                                            |
| Control Voltage (External)                                                      | 1.65V <sub>DC</sub> ± 1.65V <sub>DC</sub> (V <sub>DD</sub> : 3.3V <sub>DC</sub> ), 2.5V <sub>DC</sub> ± 2.0V <sub>DC</sub> (V <sub>DD</sub> : 5.0V <sub>DC</sub> )<br>(Positive Transfer Characteristic) |
| Internal Trim (Top of Can)                                                      | ±3ppm min                                                                                                                                                                                                |
| Input Current                                                                   | 9.600 to 27.000MHz: 3mA Max<br>27.001 to 40.000MHz : 4mA Max                                                                                                                                             |
| Rise / Fall Time                                                                | 5nS Max                                                                                                                                                                                                  |
| Duty Cycle                                                                      | 50±10%                                                                                                                                                                                                   |
| Aging                                                                           | ±1ppm Per Year Max                                                                                                                                                                                       |

## Environmental & Mechanical

|                    |                                       |
|--------------------|---------------------------------------|
| Shock              | Mil-STD-883, Method 2002, Condition B |
| Solderability      | Mil-STD-883, Method 2003              |
| Solvent Resistance | Mil-STD-883, Method 215               |
| Vibration          | Mil-STD-883, Method 2007, Condition A |

## Part Numbering Guide

**Series**  
CT18S

### Tolerance / Stability

B = 1.0ppm  
C = 1.5ppm  
D = 2.0ppm  
E = 2.5ppm  
F = 5.0ppm

### Operating Temperature Range

2 = -0° to 55°C      6 = -30°C to 85°C  
3 = -10°C to 60°C      7 = -40°C to 85°C  
4 = -20°C to 70°C

Not all temp ranges available  
with all stabilities

CT18S F 3 J 1 A-25.000MHz

**Center Frequency**  
9.600MHz to 40.000MHz

### Frequency Deviation

A = 10ppm  
B = 5ppm

### Pin One Connection

1 = No Connect  
2 = Voltage Control

### Supply Voltage

H = 3.3VDC  
J = 5.0VDC

## Part Marking Guide

|         |                                                                                                         |
|---------|---------------------------------------------------------------------------------------------------------|
| Line #1 | CFP CT18S                                                                                               |
| Line #2 | XX.XXX M<br>XX.XXX = Frequency (5 Digits Max + Decimal)<br>M = Frequency Unit Of Measure (MHz)          |
| Line #3 | XX YY ZZ<br>XX = Crescent Manufacturing Identifier<br>YY = Last Two Digits of Year<br>ZZ = Week of Year |