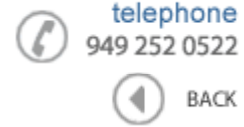





Data Sheet



Product Category: VCTCXO

| | | | |
|---------------|---------------------|-------------------|---------------|
| Series Number | Package | Description | Last Modified |
| 582 | 5 x 3.2 Ceramic SMD | Clipped Sine Wave | Jan. 01 2007 |

FEATURES

- High stable output over wide temperature range
- 1.35mm height max low profile VCTCXO
- Industry standard 5 x 3.2mm 4 Pad
- RoHs / Lead Free compliant 

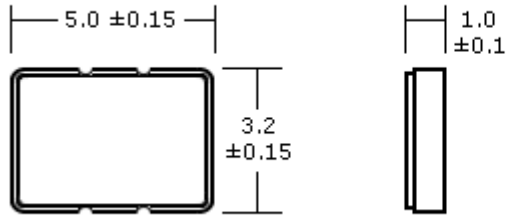


OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS | CONDITIONS | CHARACTERISTICS | | UNITS |
|--|---------------------|---|------------|--------|
| Output Waveform | - | Clipped Sine Wave | | - |
| Input Voltage (VDD) | - | 3.0 ±5% , 2.8 ±5% | 5.0 ±5% | VDC |
| Frequency Range (f_O) | - | 12.80, 13.00, 19.20, 19.6608, 19.68, 19.80, 26.00 | | MHz |
| Operating Temperature (T_{OPR}) | - | -30 ~ +85 | | °C |
| Storage Temperature (T_{STG}) | - | -40 ~ +120 | | °C |
| Frequency Tolerance | at room temperature | ±2.5 max. | | PPM |
| Temperature Stability | -30 ~ +85°C | ±2.5 max. | | PPM |
| Input Voltage Stability | VDD ±5% | ±0.3 max. | | PPM |
| Load Stability | RL ±5% | 0.2 max. | | PPM |
| Load Capacitance | - | 10 (Typ.) | | pF |
| Input Current (I_{DD}) | - | 2 max. | | mA |
| Aging | @ 25°C | ±1 max. | | PPM/Y |
| Frequency Deviation | @ Voltage Control | ±3.0 min. (±10 Typ.) | | PPM |
| Control Voltage Range | - | 0.5 ~ 2.5 | 0.5 ~ 4.5 | VDC |
| Output Voltage | Clipped Sine Wave | 0.7 P-P min. | 1 P-P min. | V |
| Start-Up Time (T_S) | - | 4 max. | | mS |
| Harmonics | 2nd Harmonic | -3 max. | | dBc |
| | 3rd Harmonic | -6 max. | | |
| | Other | -10 max. | | |
| Phase Noise (Typ.) | @ 10 Hz offset | -80 max. | | dBc/Hz |
| | @ 100 Hz offset | -115 max. | | |
| | @ 1 KHz offset | -135 max. | | |
| | @ 10 KHz offset | -140 max. | | |
| | @ 100 KHz offset | -145 max. | | |

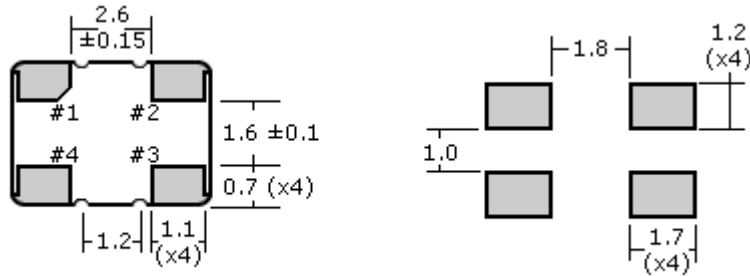
| PIN CONNECTIONS | |
|-----------------|----------------------------------|
| #1 | Control Voltage or No Connection |
| #2 | Case Ground |

PACKAGE DIMENSIONS (mm)



| | |
|----|--------|
| #3 | Output |
| #4 | Vdd |

Suggested Solder Pad Layout



PART NUMBER GUIDE

| Series Number | Frequency | Voltage Supply Option | Frequency Stability (max.) | Operating Temp. (°C) | Pin 1 Connection |
|--|--|---|---|--|--|
| 582 | - 19.6608 M | - 3 | 15 | A | - NC |
| Oscilent 5 x 3.2mm VCTCXO | Available Frequencies - 12.80 - 13.00 - 19.20 - 19.6608 - 19.68 - 19.80 - 26.00 | 5 = 5 VDC 3 = 3.0 VDC 2 = 2.8 VDC Consult with Oscilent for other available voltage options. | 15 = ±1.5 PPM 20 = ±2.0 PPM 25 = ±2.5 PPM | A = 0 ~ +50 D = -20 ~ +70 J = -25 ~ +75 K = -30 ~ +85 | NC = No Connection VC = Voltage Control |
| <p>NOTE: - Deviations on all parameters available. Please consult Oscilent for details. DEFINITIONS: - Click on the characteristic names above for definitions of that particular characteristic. *STANDARDS: - "Blank" part number selections indicate standard variables for that particular characteristic. **PACKAGING: - Add -TR for Tape/Reel. Click here for tape/reel specifications</p> | | | | | |

Oscilent Corporation - CALL **949.252.0522**

Series No.: 582

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