



Data Sheet



Product Category: Crystal Oscillator

| | | | |
|---------------|---------------------|-----------------|---------------|
| Series Number | Package | Description | Last Modified |
| 360 | Metal Dip Full Size | Programmable XO | July 01 2005 |

FEATURES

- HCMOS/TTL Output compatible
- Wide frequency range
- Low power consumption
- 5V or 3.3V optional
- RoHs / Lead Free compliant

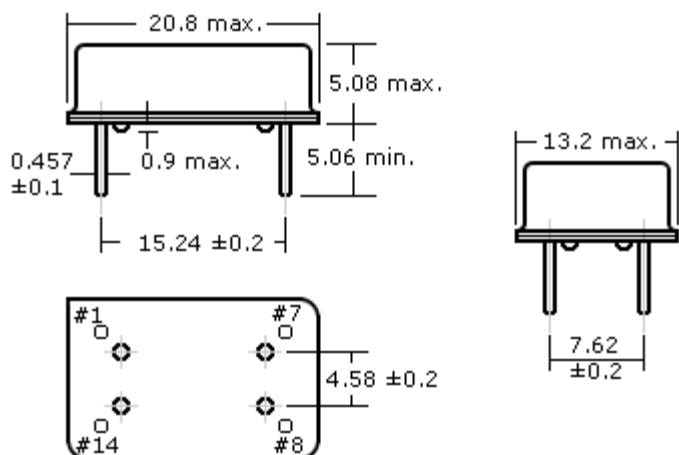


OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS | CONDITIONS | CHARACTERISTICS | | UNITS |
|--|-----------------------------|--|----------------|-------|
| Output Logic | - | HCMOS / TTL Output | | - |
| Input Voltage (VDD) | - | 3.3 ±10% | 5.0 ±10% | VDC |
| Frequency Range (f_O) | - | 1.00 ~ 125.000 | 1.00 ~ 160.000 | MHz |
| Operating Temperature (T_{OPR}) | - | 0 ~ +70 (Std.) / -40 ~ 85 (Option) | | °C |
| Storage Temperature (T_{STG}) | - | -55 ~ +125 | | °C |
| Overall Frequency Stability | a + b + c + d | ±50, ±100 max. | | PPM |
| | (a) Frequency Tolerance | Inclusive of Overall Stability | | - |
| | (b) Temperature Stability | Inclusive of Overall Stability (Operating Temperature) | | - |
| | (c) Input Voltage Stability | Inclusive of Overall Stability (VDD ±5%) | | - |
| | (d) Load Stability | Inclusive of Overall Stability (RL ±5%) | | - |
| Input Current (I_{DD}) | - | 28 max. | 45 max. | mA |
| Aging | @ 25°C | ±5 max. | | PPM/Y |
| Rise Time (T_R) | - | 4 max. (0.4V to 2.4V w/ TTL, Waveform / HCMOS) | | nS |
| Fall Time (T_F) | - | 4 max. (0.4V to 2.4V w/ TTL, Waveform / HCMOS) | | nS |
| Output Voltage High "1" VOH | TTL Load | 2.4 min. | | VDC |
| | HCMOS Load | 2.7 min. | VDD-0.5 min. | |
| Output Voltage Low "0" VOL | TTL Load | 0.4 max. | | VDC |
| | HCMOS Load | 0.5 max. | | |
| Duty Cycle | - | 50 ±10 (Std.) / 50 ±5 (Option) | | % |
| Start-Up Time (T_S) | - | 10 max. | | ms |
| Jitter | (One Sigma) | ±50 max. | | ps |

| PIN CONNECTIONS | |
|-----------------|--|
| #1 | No Connection or Tri-State Enable High |
| #7 | Case Ground |

PACKAGE DIMENSIONS (mm)



| | |
|-----|--------|
| #8 | Output |
| #14 | Vdd |

PART NUMBER GUIDE

| Series Number | Frequency | Voltage Supply Option | Frequency Tolerance & Stability (max.) | Operating Temp. (°C) | Duty Cycle | Pin 1 Connection | Gullwing |
|--|---|------------------------|--|-------------------------------|------------------------------|----------------------------|-------------------------------|
| 360 | - 4.000 M | - 3 | E | N | - T | TS | G |
| Oscilent Program. Clock Oscillators | Enter desired frequency e.g. 6.0M = 6.00 MHz See table below for standard frequencies | 5 = 5VDC 3 = 3.3VDC | D = ±100 PPM E = ±50 PPM | Blank* = 0~+70 N = -40~+85 | Blank*= 50±10% T = -50±5% | TS = Tri-State Enable High | Blank* = Std. G = Gullwing |
| <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: - Standard tube packaging, add -TR for Tape/Reel. Click here for tape/reel specifications.</p> | | | | | | | |

STANDARD OSCILLATOR FREQUENCIES - GUIDE ONLY / OTHER FREQUENCIES AVAILABLE

| FREQUENCY (1.000 - 9.8304MHz) | FREQUENCY (10.00 - 24.000MHz) | FREQUENCY (24.576 - 80.000MHz) |
|-------------------------------|-------------------------------|--------------------------------|
| 1.000 | 10.00 | 24.576 |
| 1.2288 | 11.0592 | 25.000 |
| 1.8432 | 12.000 | 25.175 |
| 2.000 | 12.288 | 28.322 |
| 2.4576 | 12.800 | 30.000 |
| 3.579545 | 14.31818 | 32.000 |
| 3.6864 | 14.7456 | 32.514 |
| 4.000 | 15.9744 | 33.000 |
| 4.9152 | 16.000 | 35.000 |
| 5.000 | 16.257 | 40.000 |
| | | |

| | | |
|---|-----------|--------|
| 5.0688 | 16.384 | 48.000 |
| 6.000 | 17.734475 | 50.000 |
| 6.144 | 18.000 | 64.000 |
| 7.3728 | 18.432 | 65.000 |
| 8.000 | 19.6608 | 66.666 |
| 9.216 | 20.000 | 80.000 |
| 9.8304 | 24.000 | - |
| NOTE: Other frequencies available. PLEASE SPECIFY IN PART NUMBER GUIDE | | |

Oscilent Corporation - CALL **949.252.0522**

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