

CO1612 SERIES: 1.6 x 1.2 mm CLOCK OSCILLATOR



■ FEATURES

- ULTRA MINATURE PACKAGE
- ESSENTIAL IN HIGH DENSITY PCB
- LOW SUPPLY VOLTAGE 1.65 VDC AVAILABLE
- STANDBY FUNCTION

■ APPLICATIONS

- PRINTER SCANNER
- VGA CARD
- DVD
- DSC, DVC

■ ELECTRICAL SPECIFICATION

| PARAMETER | | VALUE |
|-------------------------------------|------------------|---|
| Frequency Range | | 2.0 ~ 80.000 MHz |
| Operating Temperature Range | | -20°C ~ +70°C Standard -40°C ~ +85°C Extended |
| Frequency Stability ¹ ** | | ±25 ppm, ±30 ppm, ±50 ppm, ±100 ppm |
| Storage Temperature Range | | -55°C to +125°C |
| Supply Voltage | | 1.8 ~ 5.0 V |
| Supply Current | | 20 mA max |
| Output CMOS | Symmetry | 45% to 55% at 50% Vdd |
| | Rise / Fall Time | 10 ns max at 10% to 90% Vdd |
| | Logic "0" Level | Vcc x 0.1 V max |
| | Logic "1" Level | Vcc x 0.9 V min |
| | Load | 15 pF max |
| Enable / Disable Function | | Pin 1: High or Open >> Output enabled Pin 3 Pin 1: Low >> Output disabled (High impedance) |

** Inclusive of 25°C tolerance, operating temperature range, voltage or load changes, aging, shock and vibration, consult factory for tighter stability options.

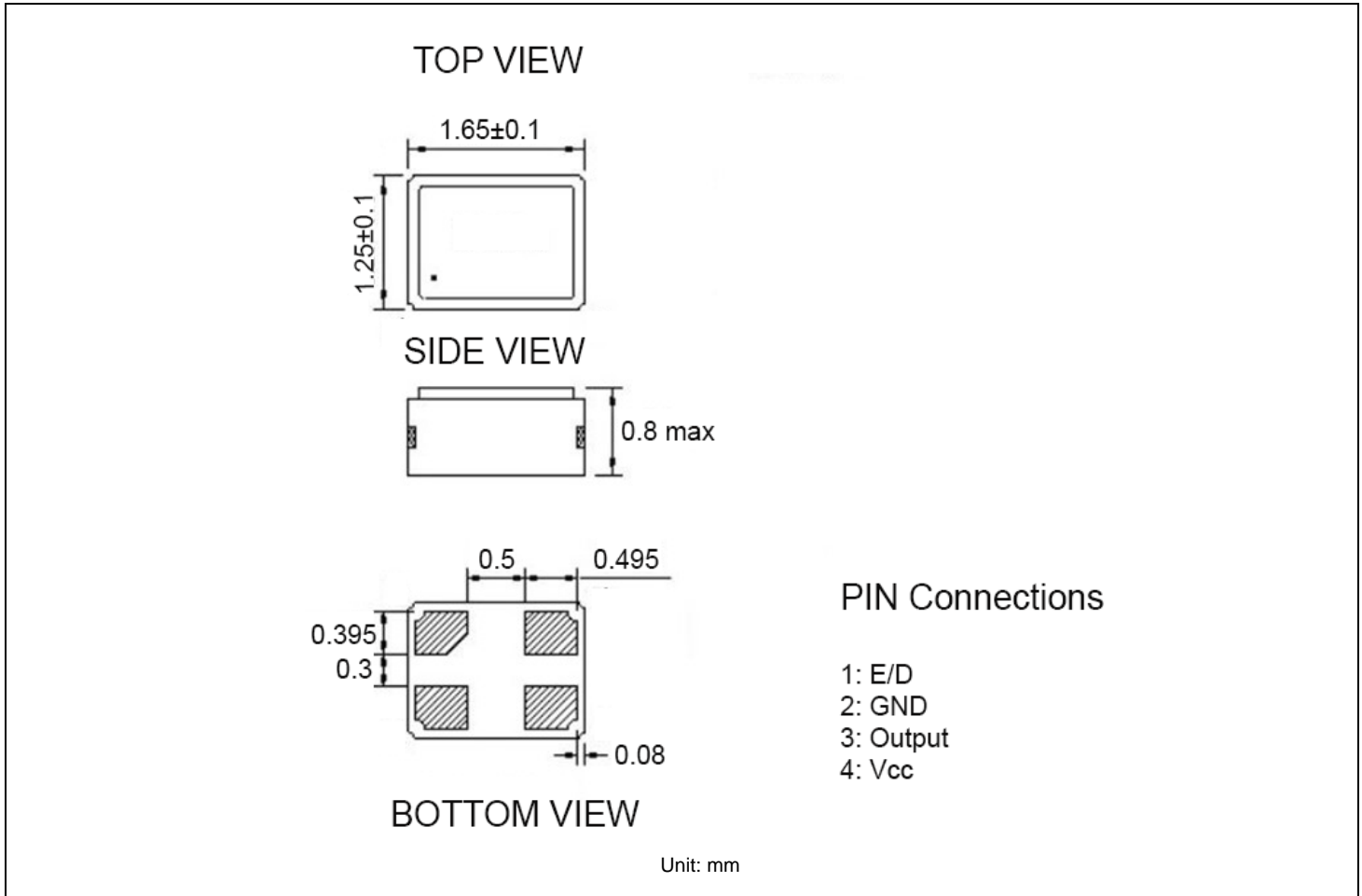
NOTES

¹ Not available at all frequencies, Contact Factory

² Check part numbering table below. For others contact factory.

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MECHANICAL SPECIFICATION (4 pin ceramic package)



PART NUMBERING SYSTEM

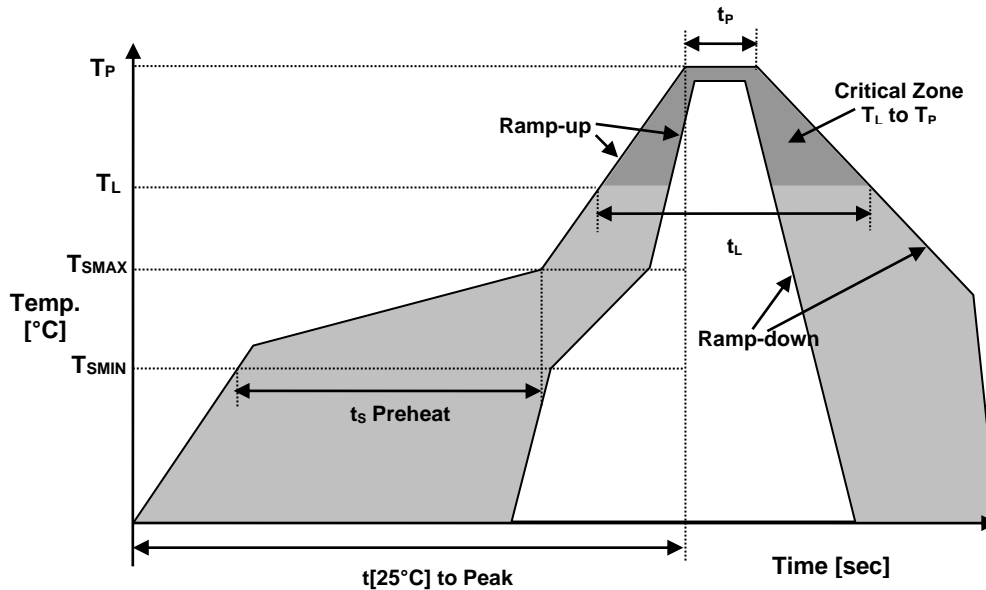
| TYPE | SERIES | FREQUENCY (MHz) | SUPPLY VOLTAGE (Vcc) | STABILITY (PPM) | TEMPERATURE RANGE | TAPE & REEL |
|------------------|--------|-----------------|--|--|--|-------------|
| Clock Oscillator | 1612 | 2.0 ~ 80.000 | 1.8: Vcc=1.8 2.5: Vcc=2.5 3.3: Vcc=3.3 5.0: Vcc=5.0 | 25: ±25 ppm 30: ±30 ppm 50: ±50 ppm 100: ±100 ppm | blank: -20°C ~ +70°C X: -40°C ~ +85°C | TR |
| CO | 1612 | 12.800 | 2.5 | 50 | | TR |

EXAMPLE: CO1612-12.800-2.5-50-TR

Surface Mount CO1612, 1.6 x 1.2 mm, 12.800 MHz, 2.5 VDC Supply Voltage, ±50 ppm Overall Stability, from -20°C to +70°C, Symmetry 45% to 55%, Tape and Reel packaging.

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REFLOW PROFILE



| Reflow profile | | |
|--|-------------------|--------------|
| Temperature Min Preheat | T _{SMIN} | 150°C |
| Temperature Max Preheat | T _{SMAX} | 200°C |
| Time (T _{SMIN} to T _{SMAX}) | t _s | 60-180 sec. |
| Temperature | T _L | 217°C |
| Peak Temperature | T _P | 260°C |
| Ramp-up rate | R _{UP} | 3°C/sec max. |
| Ramp-down rate | R _{DOWN} | 6°C/sec max. |
| Time within 5°C of Peak Temperature | t _p | 10 sec. |
| Time t[25°C] to Peak Temperature | t[25°C] to Peak | 480 sec. |
| Time | t _L | 60-150 sec. |

ENVIRONMENTAL

| PARAMETER | VALUE |
|----------------------------|-----------|
| MOISTURE SENSITIVITY LEVEL | 1 |
| REACH SVHC | COMPLIANT |
| RoHS | COMPLIANT |
| TERMINATION FINISH | Au |

