

### 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 <sup>1</sup> **		±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.

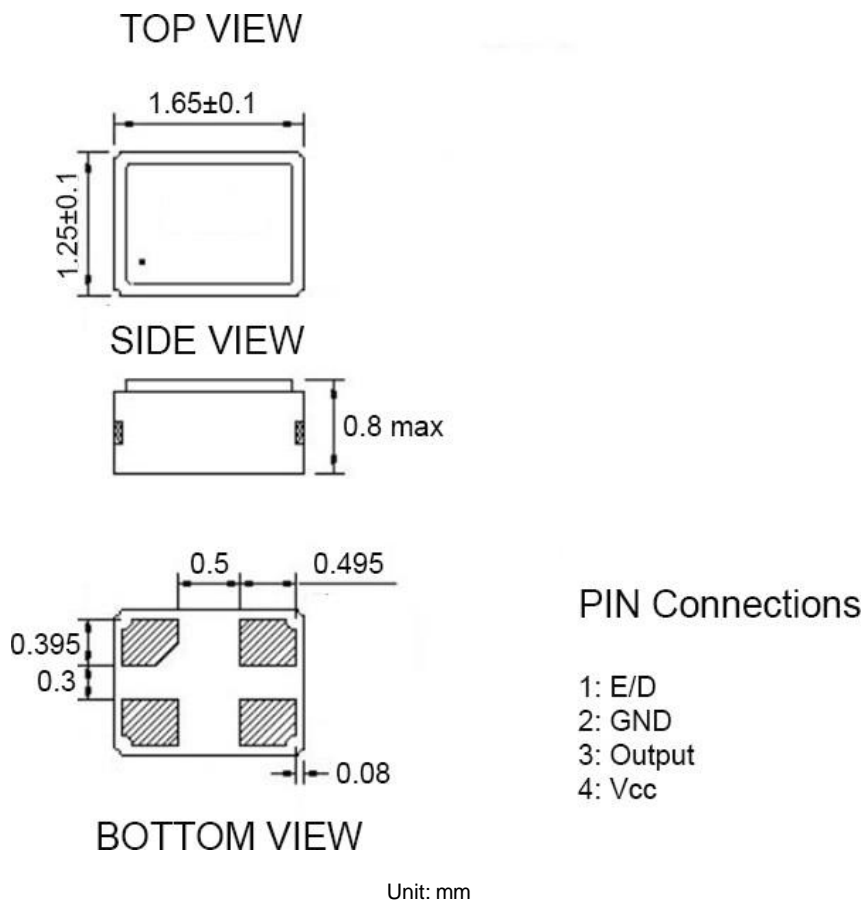
#### NOTES

<sup>1</sup> Not available at all frequencies, Contact Factory

<sup>2</sup> Check part numbering table below. For others contact factory.

### CO1612 SERIES: 1.6 x 1.2 mm CLOCK OSCILLATOR

#### MECHANICAL SPECIFICATION (4 pin ceramic package)



#### PART NUMBERING SYSTEM

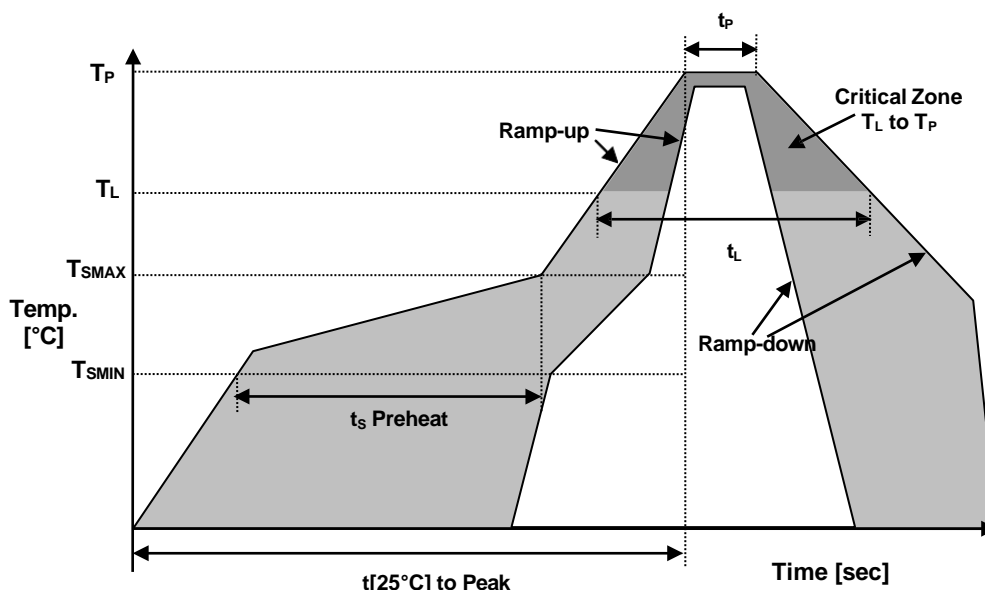
TYPE	SERIES	-	FREQUENCY (MHz)	-	SUPPLY VOLTAGE (Vcc)	-	STABILITY (PPM)	-	TEMPERATURE RANGE	-	TAPE & REEL
Clock Oscillator	1612	-	2.0 ~ 80.000	-	1.8: Vcc=1.8 2.5: Vcc=2.5 3.3: Vcc=3.3 5.0: Vcc=5.0	-	25: ±25 ppm 30: ±30 ppm 50: ±50 ppm 100: ±100 ppm	-	blank: -20°C ~ +70°C X: -40°C ~ +85°C	-	TR
CO	1612	-	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 <sub>S</sub> MIN	150°C
Temperature Max Preheat	T <sub>S</sub> MAX	200°C
Time (T <sub>S</sub> MIN to T <sub>S</sub> MAX)	t <sub>s</sub>	60-180 sec.
Temperature	T <sub>L</sub>	217°C
Peak Temperature	T <sub>P</sub>	260°C
Ramp-up rate	R <sub>UP</sub>	3°C/sec max.
Ramp-down rate	R <sub>DOWN</sub>	6°C/sec max.
Time within 5°C of Peak Temperature	t <sub>P</sub>	10 sec.
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.
Time	t <sub>L</sub>	60-150 sec.

#### ENVIRONMENTAL

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



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