

# CXO-M Military Oscillator 1.250 to 70.0MHz

ISSUE 1; 19 JUNE 1997

## Delivery Options

- Please contact our sales office for current leadtimes

## Output Compatibility

- HCMOS/TTL
- Tri-state HCMOS/TTL
- Drive Compability: 50pF or 10 TTL

## Package Outline

- Statek's 6.5 × 5.0 × 1.6mm SMD (surface mount device). Available in 5V and 3.0V Non Tri-state or Tri-state versions.

## Terminations

- SM1 - Gold over Nickel
- SM3 - Solder dipped

## Standard Frequency Stabilities

- Please see Electrical Specification table overleaf

## Operating Temperature Ranges

- C = -10 to 70°C
- I = -40 to 85°C
- M = -55 to 125°C

## Storage Temperature Range

- -55 to 125°C

## Environmental Specification

- Shock: 3000g peak, 0.3ms, ½ sine
- Vibration: 20g rms 10-2000Hz random

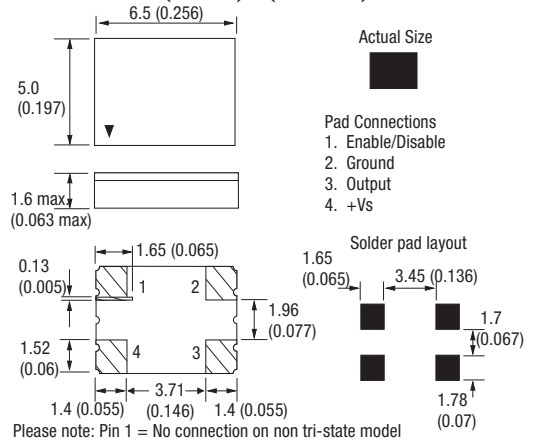
## Tri-state Operation

- Pin1 normally high (internal pull-up resistor)
- Tri-state Type  
Pin 1 logic '0' or not connected, Pin 3 high impedance  
Pin 1 logic '1', Pin 3 Output
- Non Tri-state Type  
Pin 1 logic '1' or not connected, Pin3 Output

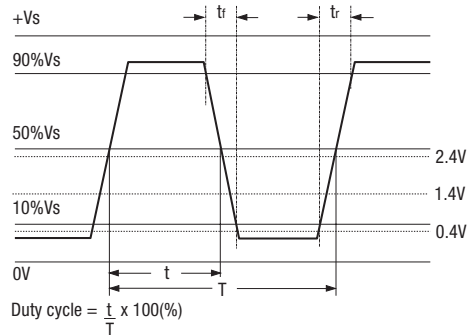
## Marking

- Model number
- Frequency Stability Code
- Frequency
- Date code (Year/Week)

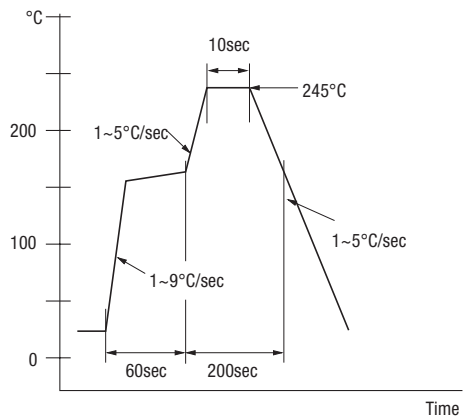
## Outline in mm (inches) - (scale 3:1)



## Output Waveform - HCMOS/TTL



## Typical Solder Condition - Infrared Reflow



### Minimum Order Information Required

- Frequency + Model Number + Load + Enable + Termination + Frequency Tolerance @ 25°C + Frequency Stability over Operating Temperature Range + Operating Range

### Electrical Specification – maximum limiting values

Frequency Range	*Frequency Tolerance @ 25°C ±2°C	Supply Current (Typical)	Supply Voltage	Operating Temperature Range	Frequency Stability Available Over Operating Temperature		Rise Time (t <sub>r</sub> )	Fall Time (t <sub>f</sub> )	Duty Cycle	Model Number
					Minimum	Maximum				
1.25 to 24.0MHz	A = ±100ppm B = ±1000ppm C = ±10000ppm	12mA	5.0V±0.5V	-10 to 70°C	±10ppm	±50ppm	6ns	6ns	40/60%	CXO-M
				-40 to 85°C	±20ppm	±100ppm				
				-55 to 125°C	±30ppm	±100ppm				
> 24.0 to 30.0MHz	A = ±100ppm B = ±1000ppm C = ±10000ppm	16mA	5.0V±0.5V	-10 to 70°C	±10ppm	±50ppm	6ns	6ns	40/60%	CXO-M
				-40 to 85°C	±20ppm	±100ppm				
				-55 to 125°C	±30ppm	±100ppm				
> 30.0 to 40.0MHz	A = ±100ppm B = ±1000ppm C = ±10000ppm	20mA	5.0V±0.5V	-10 to 70°C	±10ppm	±50ppm	6ns	6ns	40/60%	CXO-M
				-40 to 85°C	±20ppm	±100ppm				
				-55 to 125°C	±30ppm	±100ppm				
> 40.0 to 70.0MHz	A = ±100ppm B = ±1000ppm C = ±10000ppm	25mA	5.0V±0.5V	-10 to 70°C	±10ppm	±50ppm	6ns	6ns	40/60%	CXO-M
				-40 to 85°C	±20ppm	±100ppm				
				-55 to 125°C	±30ppm	±300ppm				

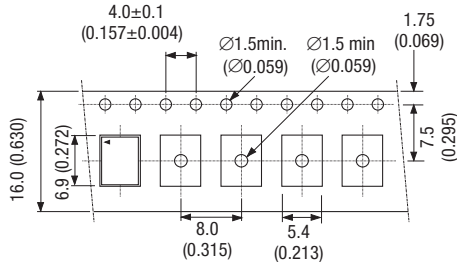
#### Ordering Example

50.0MHz CXO-M 10 T SM1 A 50 C

Frequency \_\_\_\_\_  
 Model \_\_\_\_\_  
 Load: 10= 10 TTL \_\_\_\_\_  
 Enable: T= Tri-State; N= Non tri-state \_\_\_\_\_  
 Termination \_\_\_\_\_  
 Frequency Tolerance @ 25°C \_\_\_\_\_  
 Frequency Stability over Operating Temperature Range \_\_\_\_\_  
 Operating Temperature Range: C = -10 to 70°C; I = -40 to 85°C; M = -55 to 125°C \_\_\_\_\_

Please note: Above parameters are measured at @ 25°C with a 10MΩ and 10pF load at @ 5.0V  
 3.0V HCMOS version and other frequency tolerances are available on request. Please contact our Application Support Department.

### Outline in mm (inches) - Tape



### Outline in mm (inches) - Reel (scale 1:5)

