

## FEATURES

- ✓ SMD Construction
- ✓ Standard 2.5 x 2.0mm Package Size
- ✓ Mil-Std-202 Compliant
- ✓ CMOS/HCMOS Output

## Crystal Oscillator

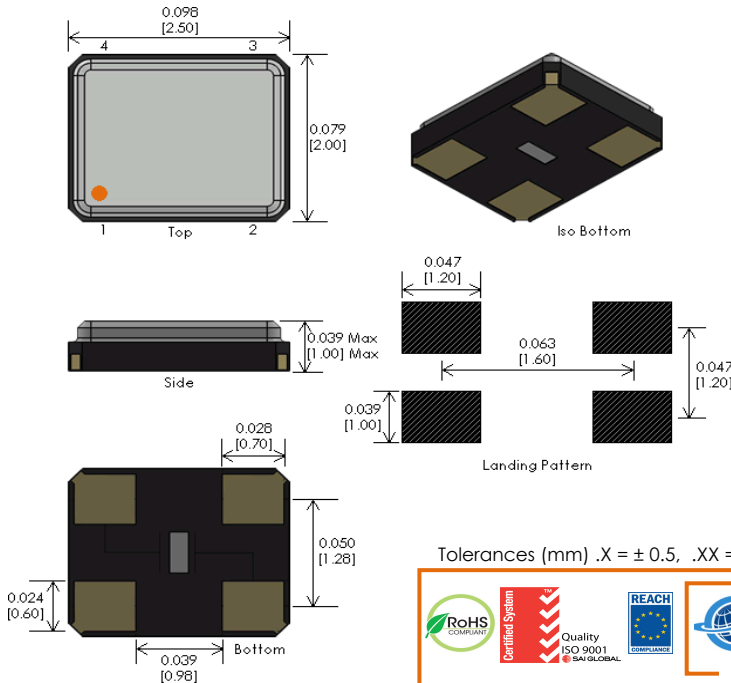
#blileytakesyoufurther

## Part Number Configuration

**BOCS2 – XXXXM – CT**

Center Frequency	Voltage	Output Control	Frequency Stability	Operating Temperature
32.768kHz 1MHz to 150MHz	B: 1.8Vdc D: 3.3Vdc E: 5.0Vdc	T: Tristate N: N.C.	A: ±25ppm B: ±50ppm	B: -20°C to +70°C C: -40°C to +85°C

## Physical Specifications



PIN	FUNCTION
1	Tristate/N.C.
2	Ground
3	Output
4	Vdc

Tolerances (mm) .X = ± 0.5, .XX = ± 0.2 unless otherwise specified



### Notes

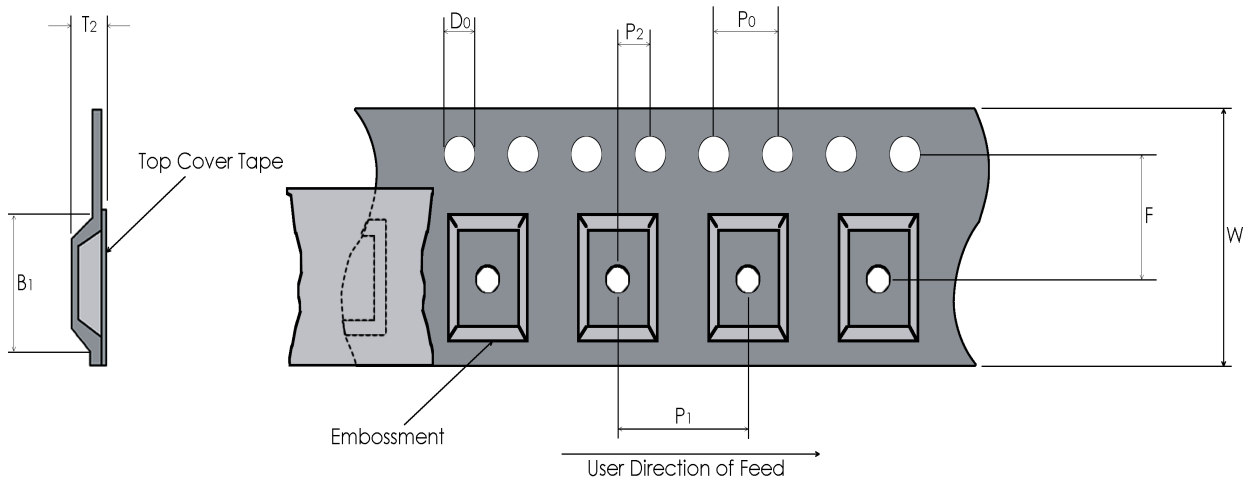
- 1) Connection Pads: Gold(10-40 μ in.) over Nickel (100-250 μ in.)
- 2) Weight = 1.5gms typical

## Performance Specifications

Parameter	Conditions	Supply Voltage ( $\pm 10\%$ )			Unit
		1.8	3.3	5.0	
	Voltage(Vdd)				Vdc
Frequency Range		32.768kHz and 1-60MHz			
Output Type & Load	CMOS/HCMOS	15pf/10TTL			
Frequency Stability		$\pm 25$ or $\pm 50$			ppm
Current Consumption @10MHz	Typical	10	10	10	mA
Current Consumption @100MHz	Typical	30	30	35	mA
Output Levels	Typical	10% Vdd Logic 0 90% Vdd Logic 1			Vdc
Rise Time(10% to 90% Vdd) Fall Time (90% to 10% Vdd)	Typical	6	8	10	ns
Duty Cycle		40/60			%
Tristate	Enabled-High Disabled-Low				
Startup Time		10			ms
Operating Temperature Range		-20 to +70 / -40 to +85			$^{\circ}\text{C}$
Storage Temperature Range		-55 to +125			$^{\circ}\text{C}$

## Tape and Reel

### Embossed Carrier Dimensions (8mm, 12mm, 16mm, 24mm Tape Only)



Tape Dimensions (mm)								Reel Dimensions (mm)	
W	F	Do	Po	P1	P2	B1	T2	Outside Dia.	Parts / Reel
8	3.5	1.5	4.0	4.0	2.0	3.5	.85	180	1,000

## Recommended Reflow Profile

**Reflow Profile:** in accordance to IPC/JEDEC J-STD-020 (Latest Revision)

### Additional Notes:

- This part has been designed for pick and place reflow soldering
- This part may be reflowed once
- This part should not be reflowed in the inverted position

## Packaging

**Packaging:** All packaging must conform to ESD Controls detailed in ANSI/ESD S20.20 (Latest Revision)