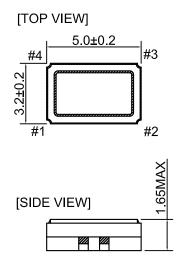
#### Features and Benefits

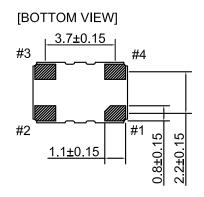
Better than +/- 200 ppb from -40°C to +85°C With respect to +25°C reading 20.000000 MHz low noise cmos output 3.3V supply; 6.0 mA max. +/- 5 ppm min. pull with 1.5V +/- 1.0V control

## Typical Applications

Mobile SATCOM Mobile Radio Harsh Environments Femto-cell

## **Mechanical Drawing**





#### PIN FUNCTIONS

Pin#	Funttion				
1	VCON/TRL-STATE				
2	GND				
3	Output				
4	V <sub>DD</sub>				

Unit: mm

# Specification

TCXO Specification	Cum	Sym Condition	Value			Unit	Note
	Sylli		Min.	Typ.	Max.	Unit	Note
Operational Frequency Range	$f_0$			20.000000		MHz	
CMOS		Logic Level High	2.97			V	
		Logic Level Low			0.33	V	
		Output Load Capacitance			15.0	pF	
		Duty Cycle	45	50	55	%	
		Rise and Fall Times			8.0	ns	
		Start Time			2.0	ms	
Power Supply							
Voltage	$V_{cc}$		3.130	3.300	3.470	V	
Current Consumption				2.7	6.0	mA	
Frequency versus Voltage							
Pad 1: Frequency Adj.			±5.0			ppm	
Pad 1: Control Voltage			0.5	1.5	2.5	V	
Pad 1: Input Impedance			100			Kohm	
Frequency Stability							
Vs. Temperature	-40°C t	o +85°C			+/- 200	ppb	With respect to +25C frequency reading
Vs. at 25°C	Initial Accuracy before reflow				+/- 500	ppb	
Vs. +/- 5% Supply Variation	@ 25°0				+/- 300	ppb	
Vs. +/- 10 % Load Variation	@ 25°0				+/- 200	ppb	
-							
Aging							
20 year projected	After 3	Days of Operation					
					+/- 2.50	ppm	20 year Maximum
SSB Phase Noise							
@ 20 MHz		100 Hz		-117	-112	1	
		10 KHz -1		-138	-132	dBc/Hz	
				-153	-145		
		100 KHz		-156	-148		