

**Features**

- Ultra Stable
- Wide Temperature Range
- Fast Warming-up
- SMD Package (5.0x3.2mm)

**Applications**

- Base Stations
- Instrumentations
- Synthesizer
- SDH/SONET
- Medical Electronics


**BS0503C Specifications**

Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	-	1.8	-	V	$V_{CC} \pm 5\%$	
	-	2.5	-		$V_{CC} \pm 5\%$	
	-	3.3	-	V	$V_{CC} \pm 5\%$	
Supply current	-	-	30	mA		
Frequency Range	13.5~220			MHz		
Nominal Frequency	62.5, 156.25, 200			MHz		
Freq. Stability Vs. Temp.	$\pm 25$	-	$\pm 100$	ppm	-10°C~+70°C	
	$\pm 25$	-	$\pm 100$	ppm	-40°C~+85°C	
OE Control	Output Enable	VDD * 70%				
	Output Disable			VDD * 30%		
LVDS	Output Logic"High"	-	-	1.6	V	RL=100Ω
	Output Logic"Low"	0.9	-	-	V	RL=100Ω
	Duty Cycle	45	-	55	%	$(V_{OH} - V_{OL})/2$
	Rise/Fall Edge	-	-	0.5	ns	
	Load	-	-	100	Ω	
RMS Jitter	-	0.2	0.5	ps	12 KHz to 20 MHz	
Start-up Time	-	-	10	ms		
Aging/ First Year	-	-	$\pm 3.0$	ppm	Standard@25°C	
SSB Phase Noise @156.25MHz	-	-50	-	dBc/Hz	Offset 10Hz	At +25°C
	-	-80	-		Offset 100Hz	
	-	-115	-		Offset 1kHz	
	-	-135	-		Offset 10kHz	
	-	-142	-		Offset 100kHz	

**Environmental Conditions**

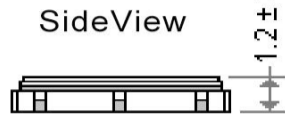
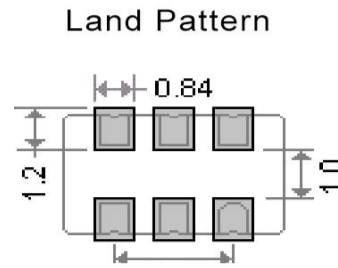
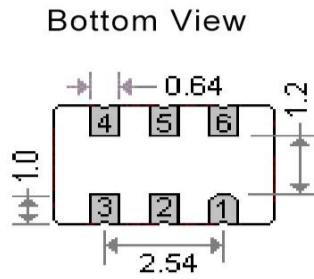
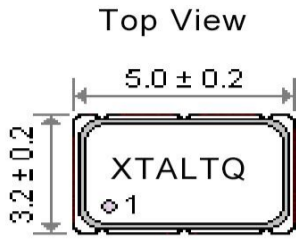
Operating Temperature Range	-40°C~+85°C
Storage Temperature Range	-50°C ~ +150°C

**Reliability**

Parameter	Condition
Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solderability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC

### Outline Dimension & Pin Connections

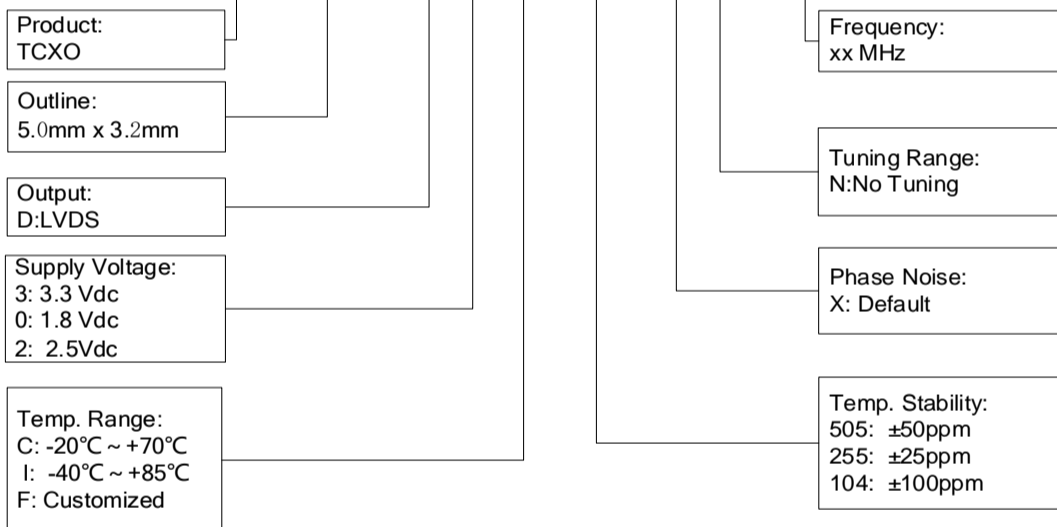
Units: mm



Pad Connections	
#1	OE
#2	NC
#3	GND
#4	Output
#5	Complementary
#6	Vcc

### Ordering Guide

**BS 0503C X X X XXX X X XX.XX**



**Example:** BS0503CD3I505XN50

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