
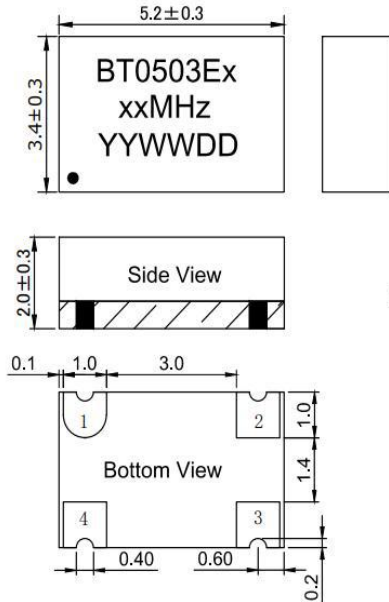
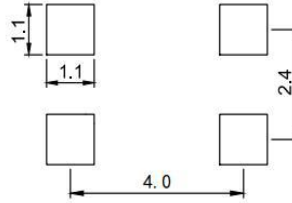


Features		Applications					
<ul style="list-style-type: none"> ● Ultra Stable ● Industrial Temperature 		<ul style="list-style-type: none"> ● Base Stations ● Instrumentations ● Synthesizer ● SDH/SONET ● Medical Electronics 					
							
BT0503E Specifications							
Parameter	Value			Unit	Conditions		
	Min.	Typ.	Max.				
Supply Voltage	-	3.3	-	V	Vcc±5%		
	-	5	-	V	Vcc±5%		
Supply Current	-	-	8	mA	10MHz~26MHz (Including 26MHz)		
	-	-	12	mA	26MHz~60MHz		
Frequency Range	10~60			MHz			
Nominal Frequency	10, 16.384, 19.2, 20, 24.576, 25, 26, 30.72, 40, 50			MHz			
Initial Frequency Tolerance	±0.5	-	±1.5	ppm	At shipment, nominal EFC, +25°C		
Freq. Stability Vs. Temp.	±0.2	-	±1.5	ppm	-20°C~+70°C		
	±0.28	-	±1.5	ppm	-40°C~+85°C		
	±1	-	±2.5	ppm	-50°C~+90°C		
	±2.5	-	±3.5	ppm	-55°C~+95°C		
Clipped Sine Wave	Output Level	0.8	-	Vp-p			
	Load	10kΩ//10pF					
HCMOS	V _{OH}	2.4	-	V	HCMOS Output, Load=15pf		
	V _{OL}	-	-	0.4	V	HCMOS Output, Load=15pf	
	Duty Cycle	45	-	55	%	(V _{OH} - V _{OL})/2	
	Rise/Fall Edge	-	-	6	ns	HCMOS Output, Load=15pf	
	Load	-	-	15	pf		
RMS Jitter(By E5052B)	-	-	1.3	ps	12KHz~5MHz		
Supply Sensitivity	-	-	±0.1	ppm	Vcc±5%		
Load Sensitivity	-	-	±0.2		Load±5%		
Aging/ First Year	-	-	±1.0		Standard		
SSB Phase Noise @10MHz	-	-	-95	dBc/Hz	Offset 10Hz	At +25°C	
	-	-	-120		Offset 100Hz		
	-	-	-140		Offset 1kHz		
	-	-	-145		Offset 10kHz		
	-	-	-150		Offset 100kHz		
	Control Voltage Range	1.5 ± 1.0			V		
Frequency Tuning Range	±5	-	±12	ppm			
Tuning Slope	positive						
Non-linearity	-	-	10	%			
Phase Noise @1KHz							
Frequency Range	<-125dBc	<-130dBc	<-135dBc	<-140dBc	○=Available X= Not Available		
10MHz	○	○	○	○			
12.8MHz~20MHz	○	○	○	X			
20.48MHz~38.4MHz	○	○	X	X			
≥40MHz	○	X	X	X			
Environmental Conditions							
Operating Temperature Range	-40°C ~ +85°C						
Storage Temperature Range	-55°C ~ +125°C						

Outline Dimension & Pin Connections

Package E

Pin Connections

Pin1	Vcon/NC
Pin2	GND
Pin3	Output
Pin4	Vcc

Recommended Land Pattern


Maximum Ratings

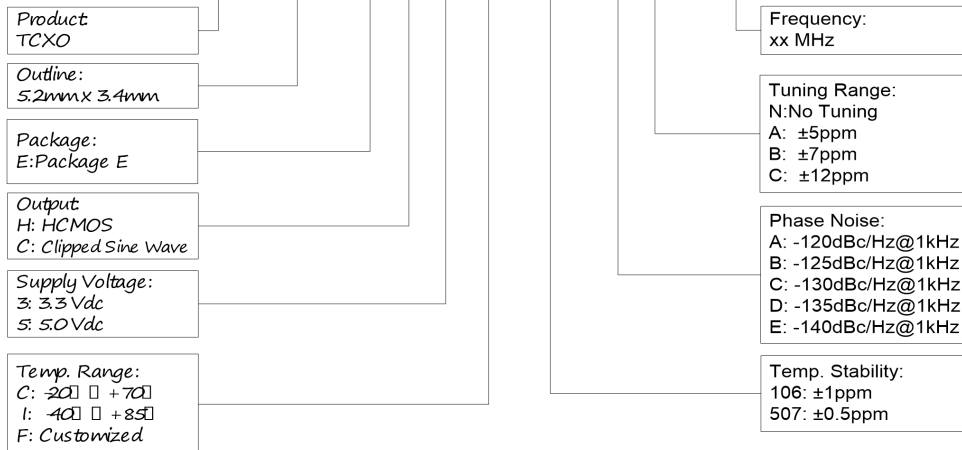
Parameter	Symbol	Rating
Supply Voltage	Vdd	-0.5V / 6V
Control Voltage	Vcon	0V / 3V
ESD, HBM/CDM/MM		4KV/ 2KV/ 200V

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

Ordering Guide

BT 0503 X X X X XXX X X XX.XX



Example: BT0503DH3C106CA30.72

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