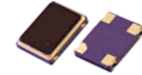


Features

- Wide Frequency Range
- Small SMD Package (3.2x2.5mm)
- Provide Stratum III Level Frequency Stability

Applications

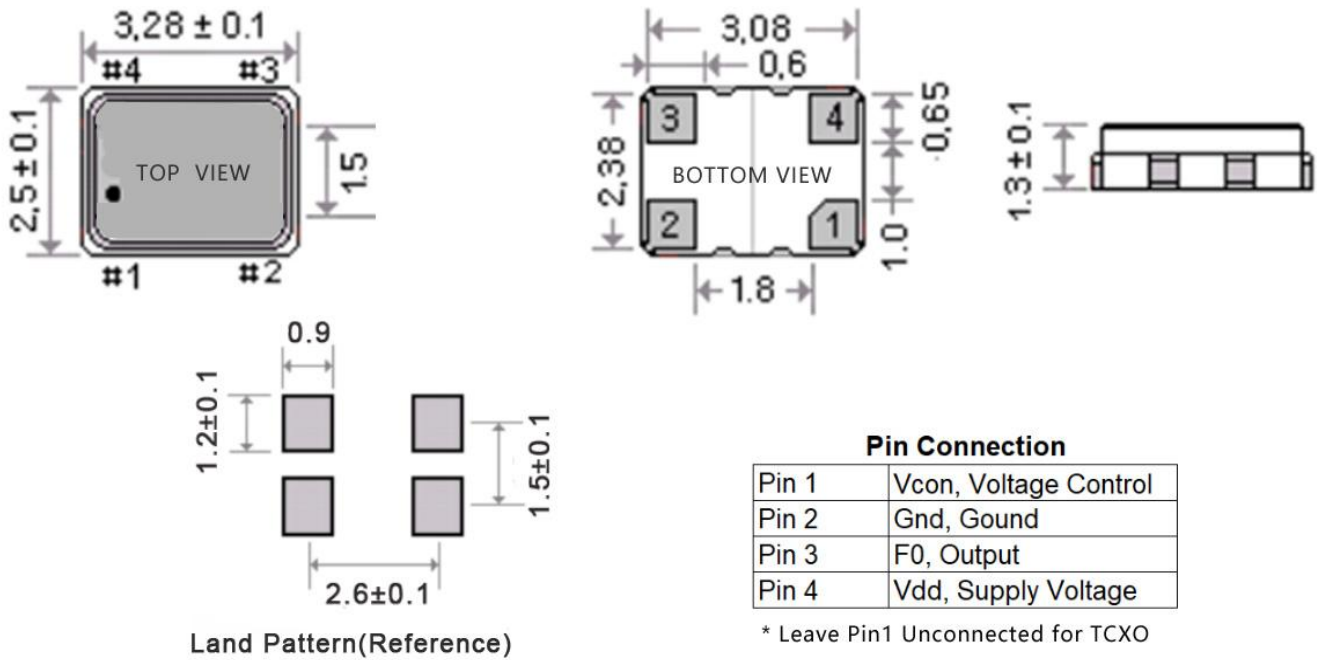
- Hand-hold Instrument
- GPS/Navigation
- Synthesizer/SDH/SONET
- WiFi/WiMAX/WLAN
- Medical Electronics


BT3225A Specifications

Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	1.8/2.5/3.0/3.3/5.0			V	Clipped Sine Wave	
	2.5/3.0/3.3/5.0			V	CMOS	
Supply Current	1.5	-	10	mA		
Frequency Range	8.192~ 52			MHz		
Nominal Frequency	10, 19.2, 20, 25, 26, 30.72, 40			MHz		
Initial Frequency Tolerance	±1.0	-	±2.0	ppm	At shipment, nominal EFC, +25°C	
Freq. Stability Vs. Temp.	±0.28	-	±0.5	ppm	-20°C ~ +70°C, Clipped Sine Wave	
	±1.0	-	±3	ppm	-20°C ~ +70°C	
	±1.0	-	±3	ppm	-40°C ~ +85°C	
CMOS	V _{OH}	VDD-0.4V	-	V	CMOS Output, Load=15pf	
	V _{OL}	-	0.4	V	CMOS Output, Load=15pf	
	Duty Cycle	40	-	60	%	(V _{OH} - V _{OL})/2
	Rise/Fall Edge	-	-	10	ns	CMOS Output, Load=15pf
	Load	-	-	15	pf	
Clipped Sine Wave	Output Level	0.8	-	Vp-p		
	Load	10kΩ//10pF				
Supply Sensitivity	-	-	±0.3	ppm	Vcc±5%	
Load Sensitivity	-	-	±0.3		Load±10%	
Aging/ First Year	-	-	±1.0		Standard	
SSB Phase Noise @10MHz	-	-95	-	dBc/Hz	At +25°C	
	-	-120	-			
	-	-135	-			
	-	-145	-			
	-	-150	-			
Control Voltage Range	0.9 ± 0.6			V	1.8V Vdd, Clipped Sine Wave	
	1.5 ± 1.0			V	2.5/3.0/3.3/5V Vdd	
Frequency Turning Range	±5	-	-	ppm		
Tuning Slope	Positive					
Non-linearity	-	-	10	%		
Environmental Conditions						
Operating Temperature Range	-40°C ~ +85°C					
Storage Temperature Range	-55°C ~ +125°C					

Outline Dimension & Pin Connections

Outline Dimensions: mm



Pin Connection

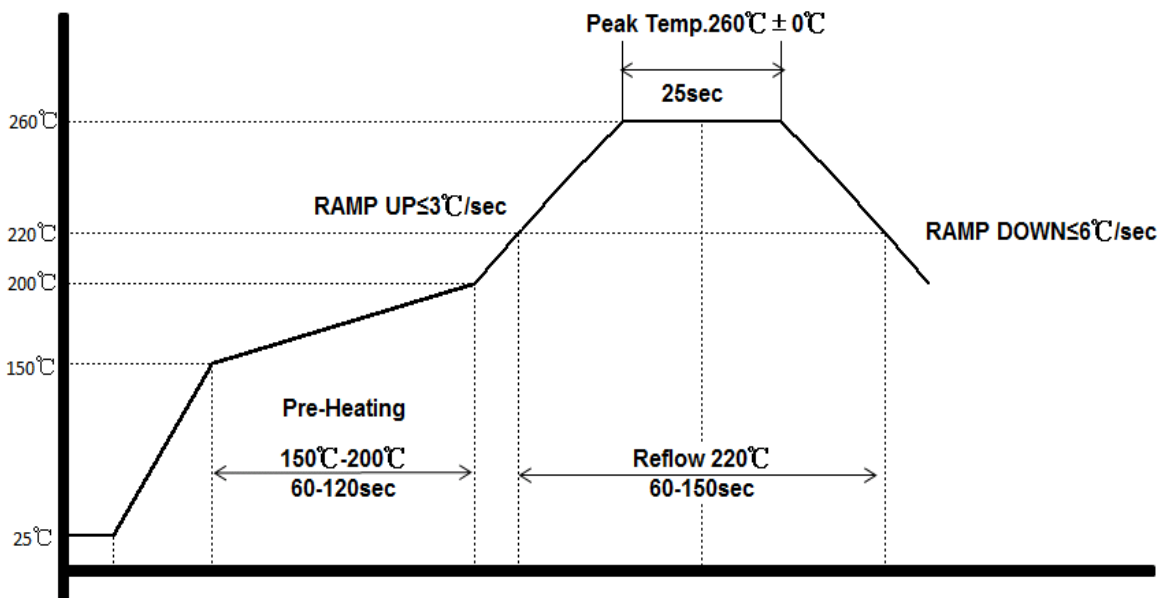
Pin 1	Vcon, Voltage Control
Pin 2	Gnd, Ground
Pin 3	F0, Output
Pin 4	Vdd, Supply Voltage

* Leave Pin1 Unconnected for TCXO

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

IR Reflow Profile



Ordering Guide

BT 3225 A X X X XXX X X XX.XX

Product:
TCXO

Outline:
3.2mm x 2.5mm

Package:
A: Package A

Output:
C: Clipped sine
H: CMOS

Supply Voltage:
0: 1.8 V
2: 2.5 V
3: 3/3.3V
5: 5V

Temp. Range:
C: -20°C ~ +70°C
I: -40°C ~ +85°C
F: Customized

Frequency:
xx MHz

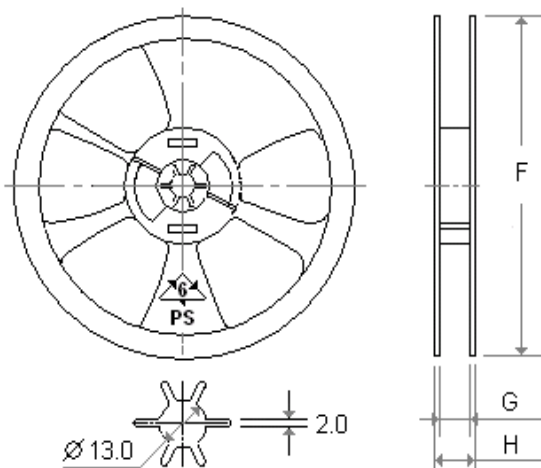
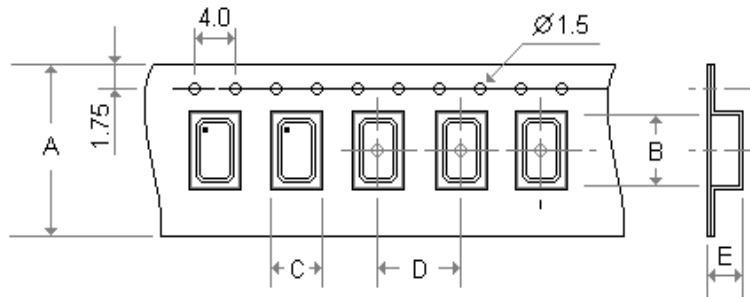
Tuning Range:
N: No Tuning
A: ±5ppm
B: ±7ppm

Phase Noise:
A: -120dBc/Hz@1kHz
B: -125dBc/Hz@1kHz
C: -130dBc/Hz@1kHz
D: -135dBc/Hz@1kHz
E: -140dBc/Hz@1kHz

Temp. Stability:
306: ±3.0ppm
206: ±2.0ppm
106: ±1.0ppm
507: ±0.5ppm

Example: BT3225AC3C506DN10

Tape & Reel



Dimensions : (Unit : mm)

A	B	C	D	E
12.0	3.6	2.9	8.0	1.3

F	G	H
180.0	12.4	16.4

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