
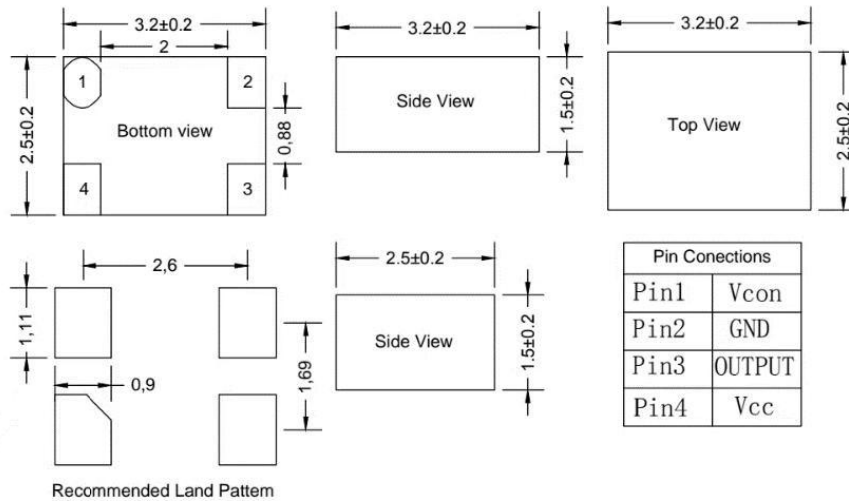


Features						Applications	
<ul style="list-style-type: none"> ● Ultra Stable ● Wide Temperature Range ● SMD Package (3.2×2.5mm) ● Provide Stratum III Level Frequency Stability 			<ul style="list-style-type: none"> ● Base Stations ● Instrumentations ● Synthesizer ● SDH/SONET ● Medical Electronics 				
BT3225AH Specifications							
Parameter		Value			Unit	Conditions	
		Min.	Typ.	Max.			
Supply Voltage		-	3	-	V		
		-	-	-	V		
Supply Current		10	-	18	mA		
Frequency Range		16~60			MHz		
Nominal Frequency		20,25,40			MHz		
Initial Frequency Tolerance		-	±0.5	±1	ppm	Connect to 1.6V center voltage, +25 °C -40°C~+105°C (Temperature compensation after pre aging)	
Freq. Stability Vs. Temp.		±0.28	±0.5	±1	ppm		
LVCMOS	V _{OH}	2.4	-	-	V	LVCMOS Output, Load=15pf	
	V _{OL}	-	-	0.4	V	LVCMOS Output, Load=15pf	
	Duty Cycle	45	-	55	%	(V _{OH} - V _{OL})/2	
	Rise/Fall Edge	-	-	6	ns	LVCMOS Output, Load=15pf	
	Load	-	-	15	pf		
RMS Jitter(By E5052B)		0.4	-	1.3	ps	12KHz~5MHz	
Supply Sensitivity		-	-	±0.1	ppm	Vcc±5%	
Load Sensitivity		-	-	±0.2		Load±5%	
Aging/ First Year		-	-	±1.0		Customized (The test was conducted after 60 days of pre aging at 85 °C)	
Aging/Day		-	-	-	ppb		
SSB Phase Noise @20MHz		-	-	-95	dBc/Hz	Offset 10Hz	
		-	-	-120		Offset 100Hz	
		-	-	-140		Offset 1kHz	
		-	-	-150		Offset 10kHz	
		-	-	-155		Offset 100kHz	
Control Voltage Range		1.5 ± 1.5			V		
Frequency Turning Range		±5	-	±12	ppm		
Tuning Slope		positive					
Non-linearity		-	-	10	%		

Outline Dimension & Pin Connections



Environmental Conditions

Operating Temperature Range	-40°C ~ +105°C
Storage Temperature Range	-55°C ~ +125°C
Storage Temperature Range	MSL2

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 3225 A H X X XXX X X XX.XX

Product
TCXO

Outline:
3.2mm x 2.5mm

Package:
A: Package A

Output
H: HCMOS

Supply Voltage:
3: 3.0Vdc

Temp. Range:
V: -40 □ +105 □
I: -40 □ +85 □

Frequency:
xx MHz

Tuning Range:
N: No Tuning
A: ±5ppm
B: ±7ppm
C: ±12ppm

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

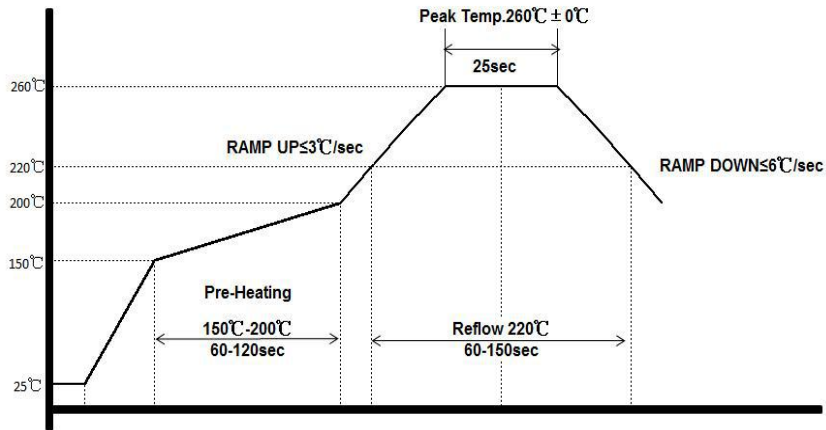
Temp. Stability:
106: ±1ppm
507: ±0.5ppm
287: ±0.28ppm

Example: BT3225AH3I106CA20

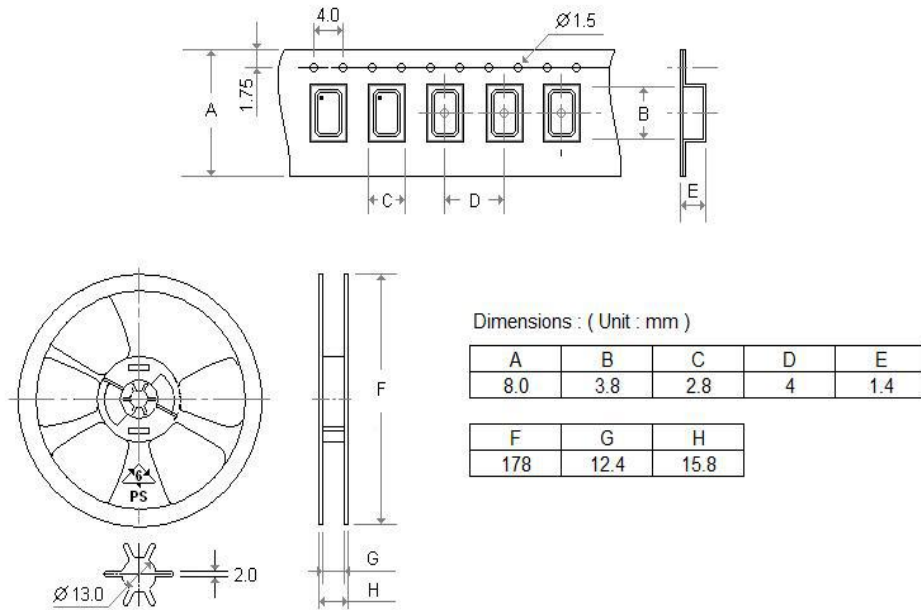
Phase Noise @1KHz

Freq. Range	<-125dBc	<-130dBc	<-135dBc	<-140dBc	
20MHz				A	A=Available
25MHz			A	N/A	N/A=Not Available
40MHz		A	N/A	N/A	

IR Reflow Profile



Tape & Reel



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