

Features

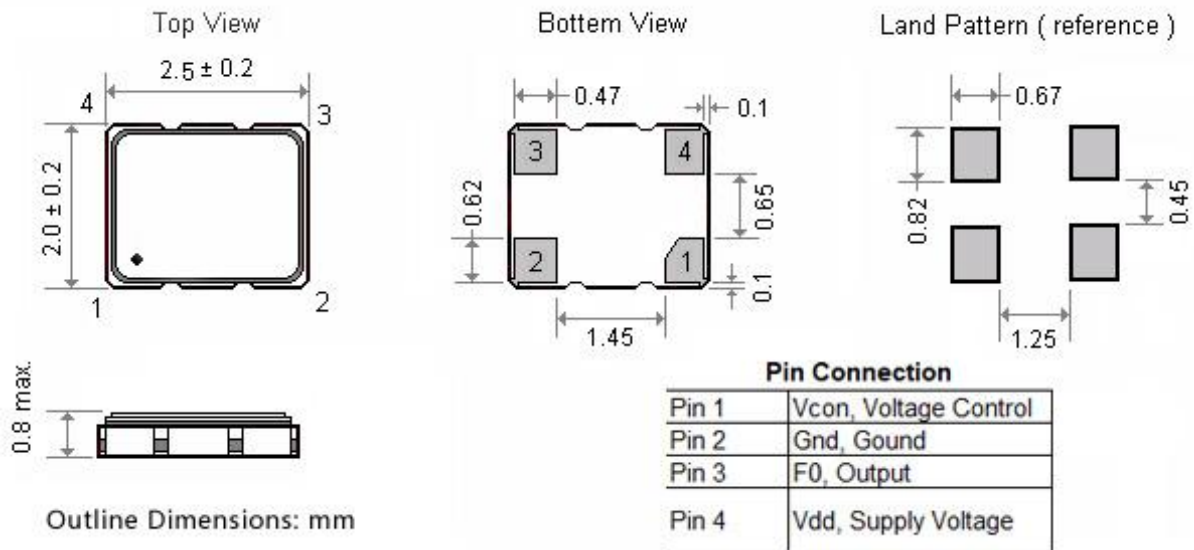
- Ultra Stable
- Wide Temperature Range
- SMD Package (2.5x2.0mm)
- Provide Stratum III Level Frequency Stability

Applications

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


BT2520A Specifications

Parameter	Value			Unit	Conditions
	Min.	Typ.	Max.		
Supply Voltage	1.8/2.5/2.8			V	
Supply Current	-	-	3	mA	
Frequency Range	16~ 40			MHz	Standard
	10~ 52			MHz	Customized
Nominal Frequency	16, 20, 25, 26, 30.72, 40			MHz	
Initial Frequency Tolerance	-	-	±1.0	ppm	At shipment, nominal EFC, +25°C
Freq. Stability Vs. Temp.	±0.5	-	±0.5	ppm	-20°C ~ +70°C
	±0.5	-	±3	ppm	-20°C ~ +70°C
	±1	-	±3	ppm	-40°C ~ +85°C
Clipped Sine Wave	Output Level	0.8	-	Vp-p	
	Load	10KΩ//10pF			
Supply Sensitivity	-	-	±0.2	ppm	Vcc±5%
Load Sensitivity	-	-	±0.2		Load±10%
Aging/ Day	-	-	±0.02		
Aging/ First Year	-	-	±1.0		
SSB Phase Noise @10MHz	-	-95	-80	dBc/Hz	Offset 10Hz
	-	-120	-115		Offset 100Hz
	-	-135	-130		Offset 1kHz
	-	-145	-145		Offset 10kHz
	-	-150	-148		Offset 100kHz
Control Voltage Range	0.9± 0.6			V	Vs=1.8Vdc
	1.4 ± 1.0			V	Vs=2.5/2.8Vdc
	1.5 ± 1.0			V	Vs=3/3.3Vdc
Frequency Turning Range	±5	-	-	ppm	
Tuning Slope	Positive				
Non-linearity	-	-	10	%	
Input Impedance	1	-	-	MΩ	±0.28ppm Temp. Stability
	100	-	-	KΩ	Standard
Environmental Conditions					
Operating Temperature Range	-40°C ~ +85°C				
Storage Temperature Range	-55°C ~ +125°C				

Outline Dimension & Pin Connections


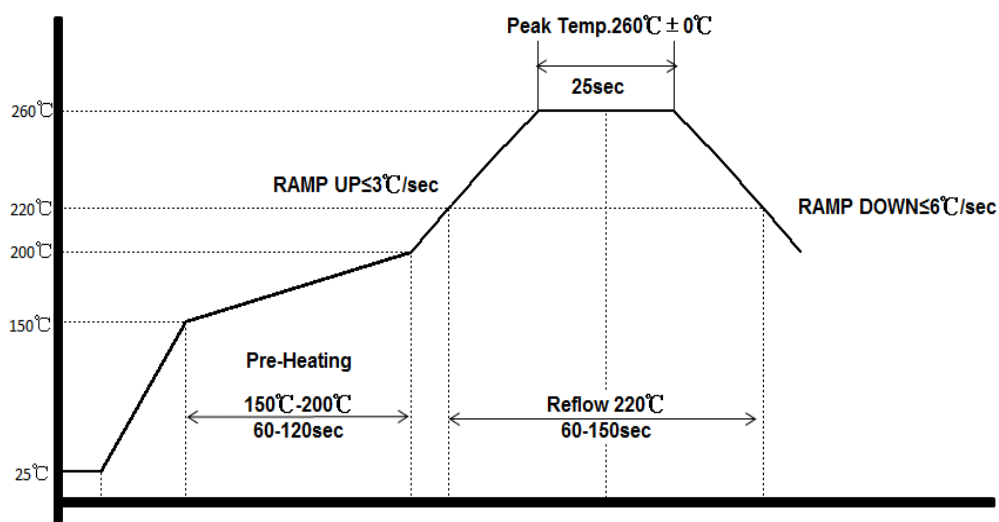
* Leave Pin1 Unconnected for TCXO.

Maximum Ratings

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

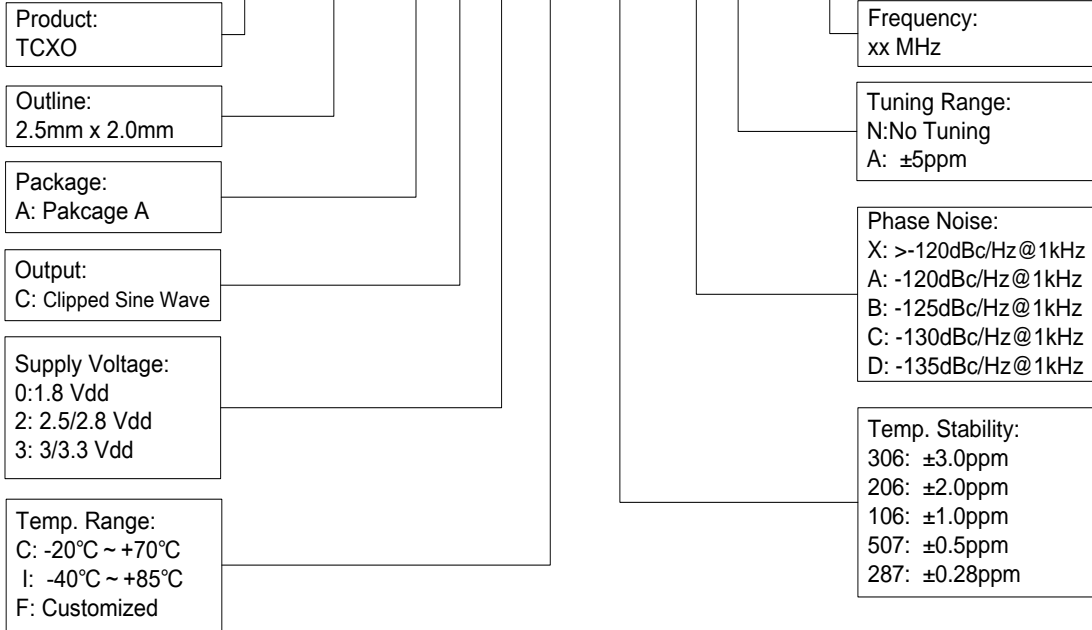
Reliability

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

IR Reflow Profile


Ordering Guide

BT 2520 A X X X XXX X X XX.XX



Example: BT2520AC3C106BN10

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