



HCMOS TCXO

STO-7050B

Applications

- Cellular and Network equipment

Features

- HCMOS output with Tri-state function
- Ceramic package, Dimensions(7.0×5.0×1.40)
- High stability $\pm 2.5\text{ppm} / -30^\circ\text{C} \sim +75^\circ\text{C}$
- Low current consumption
- Low phase noise, Low jitter

Specifications



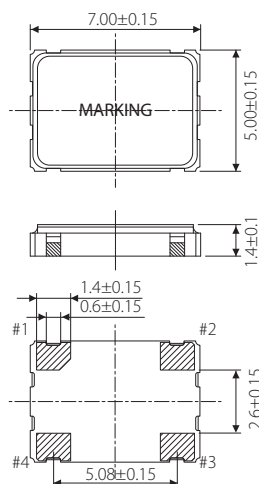
Model	STO-7050B	
Frequency range	2.500~55.000 MHz	
Nominal frequency (MHz)	5, 10, 12, 16, 20, 24, 32, 40, 44	
Storage temperature range	-40~ +125 °C	
Operating temperature range	-30~ +75 °C	
Frequency stability	Tolerance at 25°C	$\pm 2.0 \times 10^{-6}$ (Sixty minutes after reflow)
	Temperature (+25°C basis)	$\pm 2.5 \times 10^{-6} / -30 \sim +75^\circ\text{C}$
	Supply voltage change	$\pm 0.2 \times 10^{-6} / V_{\text{dd}} \pm 5\%$
	Load change	$\pm 0.2 \times 10^{-6} / Z_L \pm 10\%$
Aging	$\pm 1.0 \times 10^{-6} / \text{year at } +25^\circ\text{C}$	
Power supply voltage (Vdd)	+2.5V, +2.8V, +3.3V DC $\pm 5\%$	
Current consumption	*note / 10uA max (Standby)	
Output level	C-MOS	
Load	15pF	
Output voltage level	$V_{\text{OL}}: 10\%V_{\text{dd}} \text{ max.} / V_{\text{OH}}: 90\%V_{\text{dd}} \text{ min.}$	
Rise & Fall time	5ns max. / 10%Vdd - 90%Vdd	
Duty cycle	45% ~ 55% at 1/2Vdd	
Phase Noise / Jitter	-145dBc / Hz Typ. at 10kHz offset / 1 σ 3ps typ.	
Tri-state Function	#1: Floating. or "H"→Output enable / #1: "L"→Output disable (Hi-Z)	

*Reference / Idd Spec (mA max.)

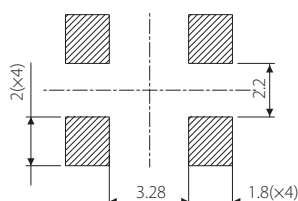
Frequency	4~10MHz	~20MHz	~30MHz	~40MHz	~54MHz
2.5V	3.1	3.7	4.2	4.6	5.5
2.8V	3.4	4.1	4.7	5.2	6.0
3.3V	4.0	4.8	5.5	6.0	7.0

Package quantity: 1,000pcs max./Reel.

Outline and Dimensions [unit:mm]



Example of a Terminal Land Pattern



Terminal	Connection
#1	Tri-state
#2	GND
#3	OUTPUT
#4	Vdd

Tri-state Function

Tri-state Pin	Output
High or Floating	Active
Low	Hi-impedance