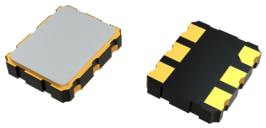
FASTXO 7.0 × 5.0 mm SMD CMOS Crystal Oscillator

Fearture



- Typical 7.0 x 5.0 SMD package
- Very low phase jitter : < 1 ps (0.6ps, typ.) RMS
- Any frequency between 10 MHz and 250 MHz
- Tri-state enable/disable
- Fast delivery

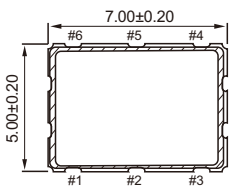
Electrical Specifications

Parameter		CMOS				Unit
		3.3V		2.5V		
		Min.	Max.	Min.	Max.	
Supply Voltage Variation		3.135	3.465	2.375	2.625	V
Frequency Range		10	250	10	250	MHz
Standard Frequency		106.25,125,133.33,150,155.52,156.25,187.5,212.5				MHz
Supply Current 10 MHz≦FO<250MHz		-	30	-	30	mA
Output level	Output High	2.97	-	2.25	-	V
	Output Low	-	0.33	-	0.25	
Transition Time : Rise/Fall Time		-	1.5	-	1.5	nSec
Start Time		-	10	-	10	mSec
Tri-State (Input to Pin 1/2)	Enable	2.31	-	1.75	-	V
	Disable	-	0.99	-	0.75	
RMS Phase Jitter(integrated 12KHz ~ 20MHz)			1	-	1	pSec
Phase Noise @125MHz	100Hz	-75		-75		dBc/Hz
	1KHz	-105		-105		
	10KHz	-120		-120		
Aging(@25 1st year)		-	±3	-	±3	ppm
Storage Temp. Range		-55	125	-55	125	°C

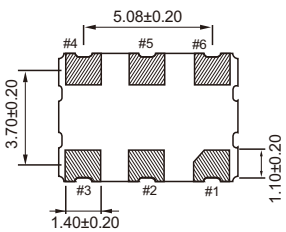
.+ Transition times are measured between 20% and 80% of VDD.

Dimension(mm)

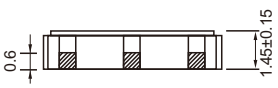
TOP VIEW



BOTTOM VIEW

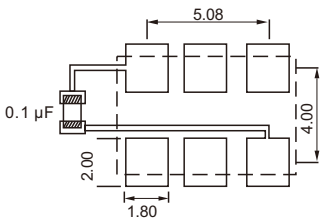


SIDE VIEW



PIN#	Function
1	NC/Tri-State
2	Tri-State/NC
3	GND
4	Output
5	Comp Output
6	VDD

Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1 μF as close to the part as possible between Vdd and GND pads.

FREQ. STABILITY vs. TEMP. RANGE

ppm / Temp. (°C)	±25	±50
-10 ~ +60	○	○
-20 ~ +70	○	○
-40 ~ +85	△	○

○: Available △:Conditional X: Not available
Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration