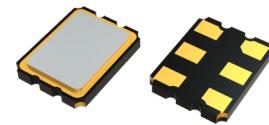


3.2 × 2.5 mm SMD LVPECL /LVDS Crystal Oscillator

Feature

- Typical 3.2 x 2.5 x 0.9mm SMD package.
- Very low jitter performance: typical 0.1 pS RMS from 12 kHz-20 MHz
- Fundamental/3rd overtone crystal design
- Output frequency up to 250 MHz
- Tri-state enable/disable
- Up to 125°C operating temperature range



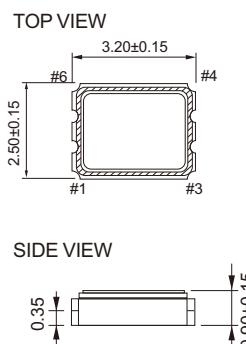
Electrical Specifications

Parameter	LVPECL								Unit	
	3.3V		2.5V		3.3V		2.5V			
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation	3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	V	
Frequency Range	10	250	10	250	10	250	10	250	MHz	
Standard Frequency	25,106.25,125,156.25,161,1328,212.5								MHz	
Supply Current	10 MHz \leq FO < 160MHz	-	75	-	75	-	50	-	50	
	160 MHz \leq FO < 250MHz	-	100	-	100	-	50	-	50	
Output level	Output High	2.275	-	1.475	-	-	1.6	-	1.6	
	Output Low	-	1.68	-	0.88	0.9	-	0.9	-	
Transition Time : Rise/Fall Time	-	1.0	-	1.0	-	1.0	-	1.0	nSec	
Start Time	-	10	-	10	-	10	-	10	mSec	
Tri-State (Input to Pin 1/2)	Enable	2.31	-	1.75	-	2.31	-	1.75	-	
	Disable	-	0.99	-	0.75	-	0.99	-	0.75	
RMS Phase Jitter (integrated 12KHz ~ 20MHz)	FO < 80MHz	-	1	-	1	-	1	-	1	
	80 MHz \leq FO < 125MHz	-	0.5	-	0.5	-	0.5	-	0.5	
	125 MHz \leq FO < 170MHz	-	0.3	-	0.3	-	0.3	-	0.3	
	170 MHz \leq FO < 200MHz	-	0.5	-	0.5	-	0.5	-	0.5	
	200 MHz \leq FO	-	0.3	-	0.3	-	0.3	-	0.3	
Phase Noise @156.25MHz	100Hz	-95		-90		-90		-90		
	1KHz	-125		-125		-120		-120		
	10KHz	-140		-140		-140		-140		
Aging(@25 1st year)	-	± 3	-	± 3	-	± 3	-	± 3	ppm	
Storage Temp. Range	-55	125	-55	125	-55	125	-55	125	°C	

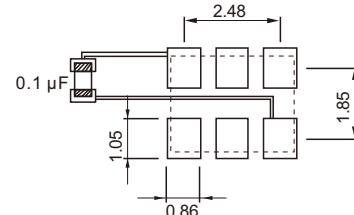
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position

.+ Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

Dimension(mm)



Solder Pad Layout(mm)



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

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	± 25	± 50
-10 ~ +60	○	○	
-20 ~ +70	○	○	
-40 ~ +85	△	○	
-40 ~ +125	X	○	

○: Available △:Conditional X: Not available

Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration