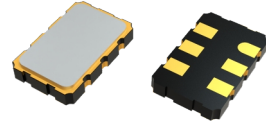


5.0 × 3.2 mm SMD LVPECL /LVDS Crystal Oscillator

Feature

- Typical 5.0 x 3.2 x 1.25mm ceramic SMD package.
- Very low jitter performance: typical 0.3 pS RMS from 12 k - 20 MHz
- Output frequency up to 320 MHz.
- Operating temperature up to 125°C
- Tri-state enable/disable

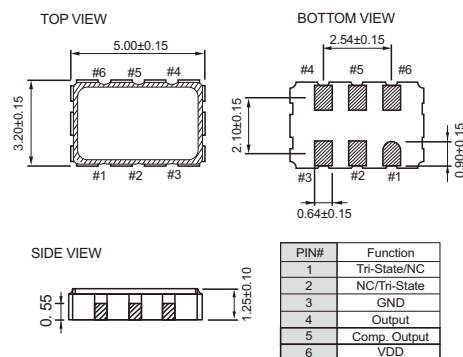


Electrical Specifications

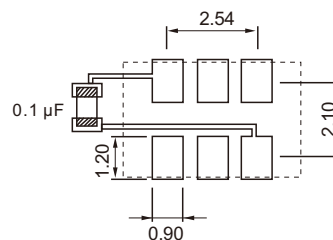
Parameter		LVPECL				LVDS				Unit
		3.3V		2.5V		3.3V		2.5V		
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation		3.135	3.465	2.375	2.625	3.135	3.465	2.375	2.625	V
Frequency Range		10	320	10	320	10	320	10	320	MHz
Standard Frequency		25,106.25,125, 156.25,161.1328,212.5								MHz
Supply Current	10 MHz $\leq$ FO<160MHz	-	75	-	75	-	50	-	50	mA
	160 MHz $\leq$ FO<250MHz	-	100	-	100	-	50	-	50	
	250 MHz $\leq$ FO<320MHz	-	100	-	100	-	65	-	65	
Output level	Output High	2.275	-	1.475	-	-	1.6	-	1.6	V
	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	-	V
	Disable	-	0.99	-	0.75	-	0.99	-	0.75	
RMS Phase Jitter(integrated 12KHz ~ 20MHz)	FO<80MHz	-	1	-	1	-	1	-	1	pSec
	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		dBc/Hz
	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 µF 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