Oscillator (CMOS/LVPECL/LVDS/HCSL Output)

XO3225

3.2 x 2.5 mm SMD
Crystal Oscillator

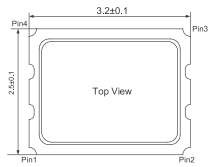
FEATURES

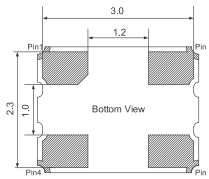
- Typical 3.2 x 2.5 x 1.0mm Ceramic SMD Package
- Tight Symmetry (45 to 55%) Available
- Operation Voltage: 1.35-5.5V
- Tri-State Enable/Disable Operation

TYPICAL APPLICATION

- SDH/SONET/WiMAX
- LTE and base station

DIMENSIONS





Pin Connection

Name	Connection
pin 1	Tri - State
pin 2	GND
pin 3	Fout
pin 4	Vdd

ELECTRICAL SPECIFICATION

Parameter		3.3V		2.5V		1.8V		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD)		VDD-5%	VDD+5%	VDD-5%	VDD+5%	VDD-5%	VDD+5%	V
Frequency Range		1	125	1	125	1	125	MHz
Standard Frequency		24, 26, 30, 40						MHz
Supply Current	At 15pF Load	—	25	—	25	—	20	mA
	No Load Condition, 1MHz≤F_O<10MHz	—	1.0	—	1.0	—	0.75	mA
	No Load Condition, 10MHz≤F_O<20MHz	—	1.0	—	1.0	—	0.75	mA
	No Load Condition, 20MHz≤F_O<80MHz	—	1.3	—	1.3	—	1.0	mA
	No Load Condition, 80MHz≤F_O<125MHz	—	6	—	6	—	3	mA
Duty Cycle		45	55	45	55	45	55	%
Output Level	Output High	2.97	—	2.25	—	1.62	—	V
	Output Low	—	0.33	—	0.25	—	0.18	
Transition Time: Rise/Fall Time+	1.25MHz≤F_O<10MHz	—	3	—	4	—	5	nSec
	10MHz≤F_O<20MHz	—	3	—	3	—	4	nSec
	20MHz≤F_O<80MHz	—	3	—	3	—	4	nSec
	80MHz≤F_O<125MHz		3		3		4	nSec
Startup Time		—	2	—	2	—	2	mSec
Tri-State (Input to Pin2 or Pin1)	Enable (High Voltage or Floating)	2.31	—	1.75	—	1.26	—	V
	Disable (Low Voltage or GND)	—	0.99	—	0.75	—	0.54	
Output Loading		15		15		15		pF
Stand by Current	(@-40 ~ 85°C)	—	10	—	10	—	10	uA
	(@-40 ~ 125°C)	—	20	—	20	—	20	uA
Aging (@25°C, 1st Year)		—	±3	—	±3	—	±3	ppm
Storage Temp. Range		-55	125	-55	125	-55	125	°C
Period Jitter(Pk-Pk)		—	40	—	40	—	40	pSec
RMS Phase Jitter(Intergrated 12KHz ~ 20MHz)		—	1	—	1	—	1	pSec

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FREQ. STABILITY vs. TEMP. RANGE

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

*o: Available Δ: Condition X: Not available
*Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration.

Note: not all combination of options are available. Other specifications may be available upon request.
Specifications subject to change without notice.