

## Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com

Drawing No:

MD200036-1

## **Features and Benefits**

Typical 2.05 x 1.65 x 0.75 mm ceramic SMD package Operation supply voltage: 1.8V, 2.5V and 3.3V FASTXO series, Fast delivery at any frequency Tri-State Enable/Disable Frequency Stability ±25ppm over -40°C to 105°C Pb-free/RoHS compliant

#### **Typical Applications**

Wearable device Mobile device IoT, Smartphone Game console

#### **Mechanical Drawing & Pin Connections**

0.60



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

1.27

0.75

0.97

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## **Specifications**

Creation	Conditon	3.3V		2.5V		1.8V		Unit
Specification	Condition	Min.	Max.	Min.	Max.	Min.	Max.	Unit
Supply Voltage		V <sub>DD</sub> -	V <sub>DD</sub> +5	Vdd-	V <sub>DD</sub> +	Vdd-	V <sub>DD</sub> +5	V
Variation		5%	%	5%	5%	5%	%	v
Frequency Range		1	200	1	200	1	125	MHz
Supply Current	15pF Loading	-	35	-	30	-	20	mA
Stand by Current	OE mode	-	20	-	20	-	20	mA
Output Load				15				pF
	Output High	0.9		0.9		0.9		
		Vdd	-	Vdd	-	Vdd	-	
Output Level	Output Loui		0.1	0.1		0.1		
	Output Low	-	V <sub>DD</sub>	-	$V_{DD}$	-	V <sub>DD</sub>	
Transition	Rise/Fall Time	_	2	_	2	_	3	nSec
			2	_	2		5	noec
Duty Cycle		45	55	44	45	45	55	%
Start Time		-	8	-	8	-	8	mSec
	Enable	0.7		0.7		0.7		
Tri-State	LIIdble	$V_{DD}$	-	$V_{DD}$	-	$V_{DD}$	-	V
	Disable		0.3		0.3		0.3	v
		-	V <sub>DD</sub>	-	$V_{DD}$	-	$V_{DD}$	
RMS Phase Jitter	12KHz to 20MHz	-	1.5	-	1.5	-	1.5	pSec
Aging	@25°C 1 <sup>st</sup> year	-	±3	-	±3	-	±3	ppm
Storage Temp. Range		-55°C to +125°C					С°	

Note: \*Transition times are measured between 10% and 90% of  $V_{\text{DD}}$  with an output load of 15pF

### Frequency Stability vs. Temperature

	±15PPM	±20PPM	±25PPM	±50PPM
-20°C to +70°C	Conditional	Available	Available	Available
-40°C to +85°C	Not Available	Conditional	Available	Available
-40°C to +105°C	Not Available	Not Available	Conditional	Available

Note: not all combination of options are available. Other specifications may be available upon request.

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