## Dynamic Engineers Inc.

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

## LC)' \$\$G!@D@I'gYf]Yg LVPECL / LVDS/8 to 1500MHz Clock Oscillator

#### **Features and Benefits**

Any frequency between 8 MHz to 1500 MHz 5.0 mm x 3.2 mm ceramic hermetically sealed package Low phase jitter: <1 pS (0.6 pS, typical) RMS Tri-state enable/disable Fast delivery

#### **Typical Applications**

Fiber Channel, Storage Area Network, High-Speed Gigabit Ethernet, SONET Smart Grid Enterprise Server, SAS / SATA Microprocessor / DSP / FPGA Broadband Access

#### **Description**

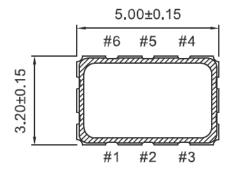
A new generation of low jitter clock oscillators with the latest low noise integrated circuit topologies.

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

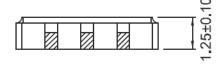
Drawing No:MD160024-1

Unit: mm 1mm=0.0394inch

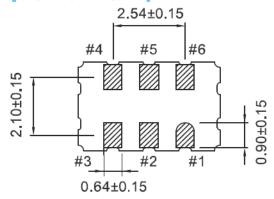
#### [TOP VIEW]



## [SIDE VIEW]



#### [BOTTOM VIEW]



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

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## **Specifications**

<b>General Specific</b>	cations									
Output Logic Ty	/pe	LVPECL			LVDS					
Parameter		2.5V		3.3V		2.5V		3.3V		
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Frequency Rang	ge	8 MHz	1500 MHz	8 MHz	1500 MHz	8 MHz	1500 MHz	8 MHz	1500 MHz	
Standard Frequency		106.25MHz, 125.00MHz, 133.33MHz, 150.00MHz, 155.52MHz, 156.25MHz, 187.50MHz, 212.50MHz, 312.50MHz, 622.08MHz								
Power Supply V (V <sub>DD</sub> ) ±5%	oltage	2.375V	2.625V	3.135V	3.465V	2.375V	2.625V	3.135V	3.465V	
Supply Current 8 MHz ≤ Fo ≤ 25		-	50mA	-	50mA	-	50mA	-	50mA	
Output "High" Voltage; V <sub>он</sub>		1.475V	-	2.275	-	-	1.6V	-	1.6V	
Output "Low" Voltage; VoL		-	0.88V	-	1.68V	0.9V	-	0.9V	-	
Tri-State (Input t		1.75V								
,	Enable (High voltage or floating)		-	2.31V	-	1.75V	-	2.31V	-	
Disable (Low voltage or GND)		-	0.75V	-	0.99V	-	0.75V	-	0.99V	
Frequency Stability		±50 ppm over -20°C to +70°C or -40°C to +85°C ±25 ppm over -20°C to +70°C ±25 ppm over -40°C to +85°C (depends on operating frequency; case by case)								
Phase Noise @ 156.25 MHz	100 Hz	-	-85 dBc/Hz	-	-85 dBc/Hz	-	-85 dBc/Hz	-	-85 dBc/Hz	
	1 kHz	-	-105 dBc/Hz	-	-105 dBc/Hz	-	-105 dBc/Hz	-	-105 dBc/Hz	
	10 kHz	-	-115 dBc/Hz	-	-115 dBc/Hz	-	-115 dBc/Hz	-	-115 dBc/Hz	
Rise Time (Tr)/Fall Time (Tf) $(20\% V_{DD} - 80\% V_{DD})$		1.0ns max								
		10 ms ma	10 ms max.							
RMS Phase Jitter (Integrated 12 kHz – 20 MHz)		1.0 pSmax								
Aging (first year at 25°C)		±3 ppm max.								
Storage Temp. I	Storage Temp. Range		-55°Cto +125°C							

Stability vs. Temperature Range Availability					
	Temperature Range				
Stability in ppm	-20°C to +70°C	-40°C to +85°C			
±50	Available	Available			
		Conditional			
±25	Available	(depends on operating frequency; case			
		by case)			

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