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

FXO5300BM-CMOS
5.0x3.2mm SMD Crystal Oscillator

Features and Benefits

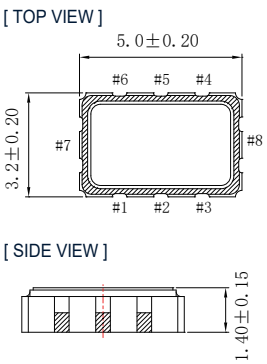
Low Power Supply Voltage: 3.3, 2.5,1.8V supply options
Clock Output: CMOS
Output frequency support from 15MHz to 250MHz
Ultra Low Noise, Phase Jitter < 300 fs
(Typical: 150 fs at 12kHz to 20MHz frequency offsets)
Tri-state enable / disable mode.
Temperature Range: -40°C to +85°C
Pb-free/RoHS Compliant

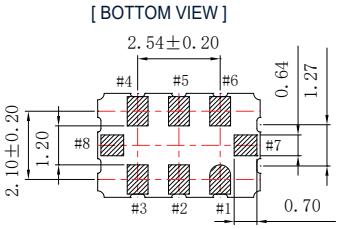
Typical Applications

SONET/SDH,. Gigabit Ethernet.
Storage Area Networking (SAN)
SD/HD video
FPGA clock generation

Mechanical Drawing & Pin Connections

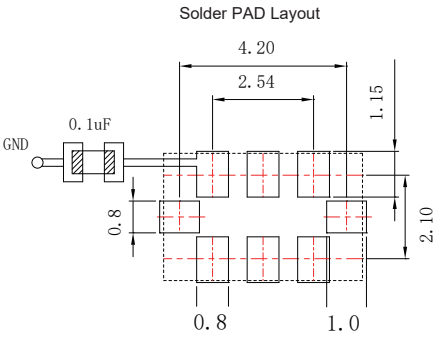
Drawing No: MD200027-2





PIN#	FUNCTION CMOS
1	NC
2	OE
3	GND
4	Output
5	NC
6	VDD
7	NC
8	NC

Unit in mm
1mm = 0.0394 inches



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Specifications

Specification	Condition	3.3V		2.5V		1.8V		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation	V_{DD}±5%	-	-	-	-	1.71	1.89	V
Supply Voltage Variation	V_{DD}±10%	3.63	2.97	2.25	2.75	-	-	V
Frequency Range		15	250	15	250	15	250	MHz
Standard Frequency		100, 106.25, 125, 156.25, 187.5, 200, 212.5, 266, 300, 312.5, 400, 491.52, 622.08, 644.531250						MHz
Supply Current		-	90	-	80	-	70	mA
Duty Cycle	F<100MHz	45	55	45	55	45	55	%
	F>100MHz	40	60	40	60	40	60	%
Output Level	Output High	0.9xV_{DD}	-	0.9xV_{DD}	-	0.9xV_{DD}	-	V
	Output Low	-	0.1xV_{DD}	-	0.1xV_{DD}	-	0.1xV_{DD}	
Transition Rise/Fall Time	20%-80%	-	1.2	-	1.5	-	2.0	nSec
Start Time		-	8	-	8	-	8	mSec
Tri-State(Input to Pin2)	Enable	0.7xV_{DD}	-	0.7xV_{DD}	-	0.7xV_{DD}	-	V
	Disable	-	0.3x V_{DD}	-	0.3xV_{DD}	-	0.3xV_{DD}	
Period Jitter		-	100	-	100	-	100	ps

Frequency Stability vs. Temperature

	±20PPM	±25PPM	±30PPM	±50PPM
-20°C to +70°C	Conditional	Available	Available	Available
-40°C to +85°C	Not Available	Conditional	Available	Available

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