

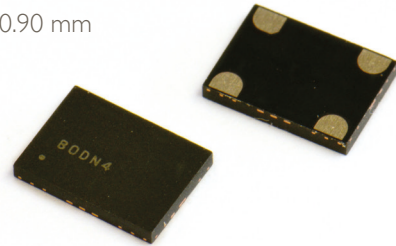
**MX7C**

**MEMS OSCILLATOR**

**FEATURES**

- Silicon MEMS resonator based oscillator
- Low power oscillator
- Very high shock and vibration resistance
- Fast delivery
- 500 million hours MTBF

7.0 x 5.0 x 0.90 mm



Item	Specification	
Frequency Range	1.0 - 110.0 MHz	115.0 - 137.0 MHz
Output Logic	CMOS	
Overall Frequency Stability *	± 20 ppm ~ ± 100 ppm ( see options )	
Operating Temperature Range	-20° ~ +70°C commercial application -40° ~ +85°C industrial application	
Supply Voltage Vdd	+1.8V ±10% +2.5V ±10% +2.8V ±10% +3.0V ±10% +3.3V ±10% +1.8V to 3.3V ±10% +2.5V to 3.3V ±10%	
Supply Current	4 mA ~ 15 mA 4 mA ~ 15 mA 4 mA ~ 15 mA 4.5 mA ~ 20 mA 4.5 mA ~ 20 mA 4.5 mA ~ 20 mA	
Output Level	VOH ≥ 0.9 Vdd	VOL ≤ 0.1 Vdd
Output Load	15 pF other load capacitance possible , please consult us.	
Symmetry	45 / 55 %	
Rise / Fall time Fr/Ff	3 ns max	
Tri-state Enable (See options)	pin #1 = high or open pin #1 = low	pin #3 ==> oscillation pin #3 ==> high impedance
Tri-state Power Down ( See options )	pin #1 = high or open pin #1 = low	pin #3 ==> oscillation pin #3 ==> low output
Standby current max.	5 µA max ( for Power Down function )	
Start-up Time	5 ms max.	
RMS Jitter (12 kHz to 20 MHz band )	2.5 ps max.	
Packing Unit	1000pcs / reel	
Marking	Lot code only	
Shock Resistance	up to 50000 G	

(\* ) Includes initial tolerance @+25°C , stability over operating temperature , stability vs. load change , stability vs. supply change and one year aging

Customer specifications on request

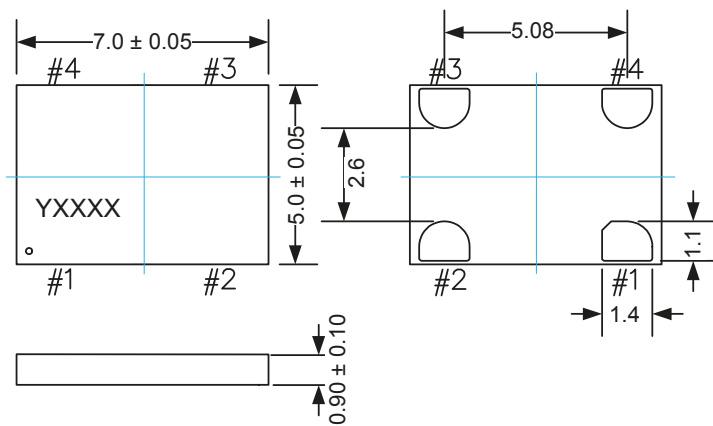
## OPTIONS & ORDERING INFORMATION

MX7C					MHz
	Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Output Load *
	<b>18</b> = +1.8V	<b>F</b> = -20° / +70°C	<b>20</b> = ±20 ppm	<b>E</b> = Tri-state Enable	<b>blanc</b> = 15 pF
	<b>25</b> = +2.5V	<b>K</b> = -40° / +85°C	<b>25</b> = ±25 ppm	<b>B</b> = Tri-state Power Down	<b>H</b> = >15 pF , consult us
	<b>28</b> = +2.8V		<b>30</b> = ±30 ppm	<b>F</b> = None	
	<b>30</b> = +3.0V		<b>50</b> = ±50 ppm		
	<b>33</b> = +3.3V		<b>100</b> = ±100 ppm		
	<b>1V3</b> = +1.8V to +3.3V				Please specify the frequency in MHz
	<b>2V3</b> = +2.5V to +3.3V				

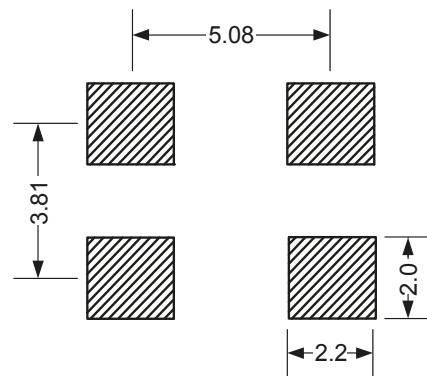
\* Note : Not all combinations are possible , please consult us.

## OUTLINE DIMENSIONS (MM)

Package Size – Dimensions (Unit: mm)



Recommended Land Pattern (Unit: mm)



### Pin Connections

#1 : E/D or NC

#2 : GND

#3: Output

#4 :Vdd