

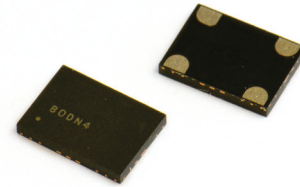
MX3C

MEMS OSCILLATOR

FEATURES

- Silicon MEMS resonator based oscillator
- Low power oscillator
- Operating temperature from -55° to 125°C
- Very high shock and vibration resistance
- Fast delivery
- 500 million hours MTBF

3.2x2.5x0.75 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 -55° ~ +125°C (from 1.0 - 110.0 MHz)					
Supply Voltage Vdd	+1.8V ±10%	+2.5V ±10%	+2.8V ±10%	+3.0V ±10%	+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)	3 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

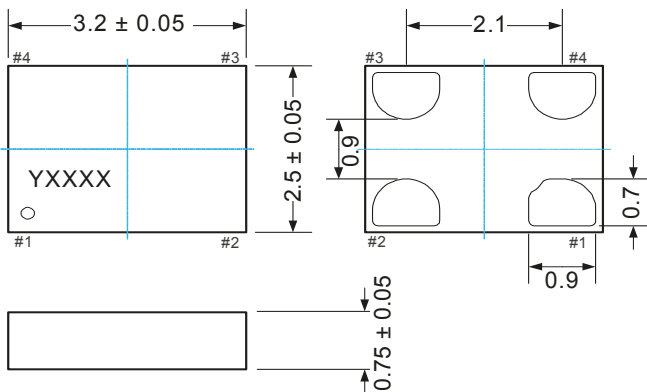
OPTIONS & ORDERING INFORMATION

MX3C					MHz	
	Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Output Load *	Frequency in MHz
	18 = +1.8V	F = -20° / +70°C	20 = ±20 ppm	E = Tri-state Enable	blanc = 15 pF	Please specify the frequency in MHz
	25 = +2.5V	K = -40° / +85°C	25 = ±25 ppm	B = Tri-state Power Down	H = >15 pF , consult us	
	28 = +2.8V	N = -55° / +125°C	30 = ±30 ppm	F = None		
	30 = +3.0V		50 = ±50 ppm			
	33 = +3.3V		100 = ±100 ppm			
	2V3 = +2.5V to +3.3V					

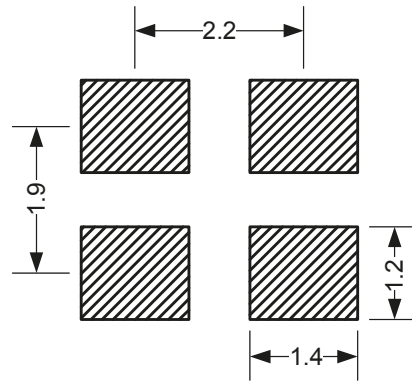
* Note : Not all combinations are possible , please consult us.

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