

# ULTRA MINIATURE PURE SILICON™ CLOCK OSCILLATOR



5.0 x 3.2 x 1.04mm

ASFLM



RoHS  
Compliant

## FEATURES:

- Ultra Miniature Pure Silicon™ Clock Oscillator
- MEMS Technology by Discera
- Low Power Consumption <10mA
- Exceptional Stability Over Temp. at 0 - 70°C
- Extended Temperature Options Also Available
- Available in 30kG Shock Resistance Configuration
- Low Cost-Compact QFN Plastic Packaging
- Compact Package design

## APPLICATIONS:

- CCD Clock for VTR Camera
- Equipment Connected to PCs
- Low Profile Equipment
- Lower Cost Crystal Oscillator Replacement
- Computers and Peripherals
- Portable Electronics (MP3 Players, Games)
- Consumer Electronics such as TV's, DVR's, etc.
- Vibrant, Shock-Prone & Humid Environments for Industrial Equipment
- Demanding Military & Automotive Electronics

MEMS  
Technology!

## STANDARD SPECIFICATIONS:

### PARAMETERS

ABRACON P/N:	ASFLM Series
Frequency range:	1.000 MHz - 125 MHz
Operating temperature:	0°C to +70°C (see options)
Storage temperature:	-55°C to +155°C
Overall Frequency Stability:	± 100 ppm max. (see options)
Supply Voltage (Vdd):	3.0 V ± 0.3 V
Supply Current: (No Load)	6.0mA max (1 - 40MHz, Vdd=3.0 ± 0.3V)
	7.0mA max (40 - 80MHz, Vdd=3.0 ± 0.3V)
	10.0mA max (80 - 125MHz, Vdd=3.0 ± 0.3V)
Supply Current: (Full Load)	9.0mA max (1 - 40MHz, Vdd=3.0 ± 0.3V)
	10.0mA max (40 - 80MHz, Vdd=3.0 ± 0.3V)
	16.0mA max (80 - 125MHz, Vdd=3.0 ± 0.3V)
Symmetry:	45/55% max. @ 1/2Vdd
Rise and Fall Times (Tr/Tf):	5ns max. (+25°C, 15pF out put load, 10/90% Vdd.)
Output Load:	15pF max., 10kohms max.
Output Voltage:	VOH = 0.9*Vdd min.
	VOL = 0.1*Vdd max.
Start-up-time:	10mS max
Enable time:	5mS max
Disable time:	100ns max.
Tri-State Function (Stand-by):	"1" or open: Oscillation "0": No oscillation/Hi Z
Stand-by Current	1uA max.
Aging at +25°C per year:	± 5ppm max.

## OPTIONS AND PART IDENTIFICATION:

(Left blank if standard)

ASFLM - Frequency - □ - □ - □

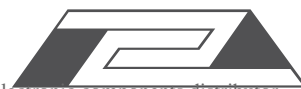
\* Please contact Abracon for Temperature Option Availability.  
Please contact Abracon for order assistance for high shock applications.

Frequency	Operating Temp.		Freq. Stability		Packaging
XX.XXXX MHz	Blank	0°C to +70°C	Blank	± 100 ppm	T Tape and Reel (1000pcs/reel)
	E*	-20°C to +70°C	C	± 50 ppm	
	L*	-40°C to +85°C			

Blank : Standard

Blank : Standard

ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 08.23.07**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

# ULTRA MINIATURE PURE SILICON™ CLOCK OSCILLATOR

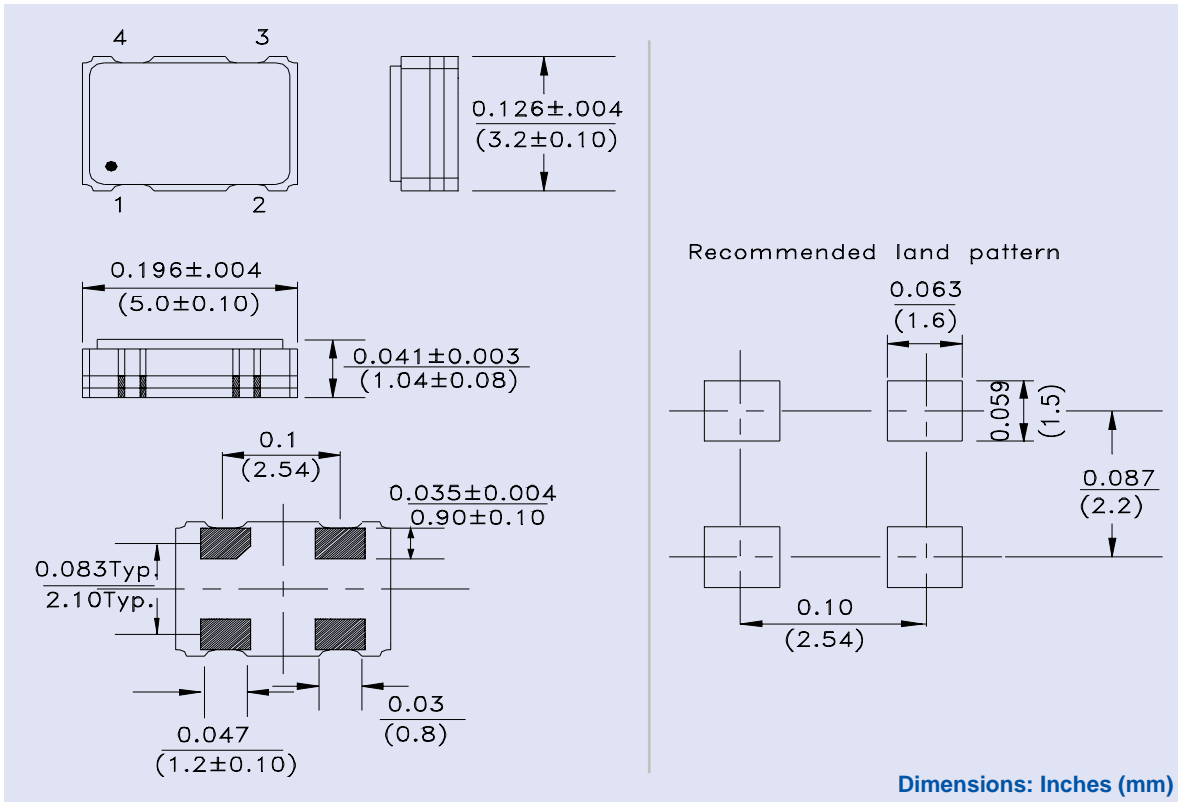


5.0 x 3.2 x 1.04mm

ASFLM



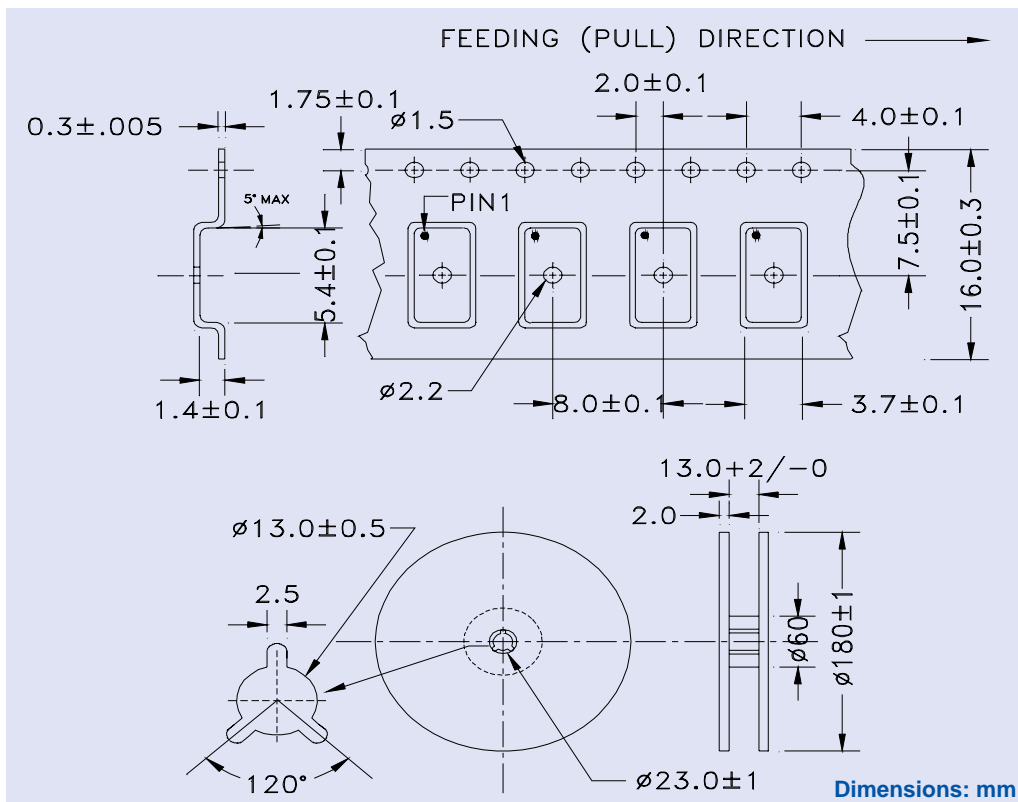
## OUTLINE DRAWING:



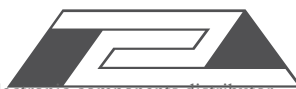
**Note:** It is recommended to use an approximately 0.01uF bypass capacitor between PIN 2 and 4.

PIN	FUNCTION
1	Tri-state (STBY)
2	GND/Case
3	Output
4	VDD

## TAPE & REEL: Tape and reel 1,000pcs/reel



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



**ABRACON**  
CORPORATION

Visit [www.abracon.com](http://www.abracon.com) for Terms & Conditions of Sale **Revised: 08.23.07**  
30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)