Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

PLASTIC PACKAGE PURE SILICON™ CLOCK OSCILLATOR

Life Size

5.0 x 3.2 x 0.85mm

ASFLM

RoHS/RoHS II Compliant

FEATURES:

- Pure Silicon™ Clock Oscillator
- MEMS Technology by Discera
- Low Power Consumption <10mA
- Low Stand by Current <1uA
- Exceptional Stability Over Temp. at 40 to +85°C
- Available over Extended Temp Range
- 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

STANDARD SPECIFICATIONS:

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range:		1.0	-----	150	MHz	
Operating Temperature:		0	-----	+70	°C	See options
Storage Temperature:		-55	-----	+150	°C	
Overall Frequency Stability*:		-100	-----	+100	ppm	See options
Supply Voltage (Vdd):		+1.8 ~ +3.3			V	See options
Supply Current (no load):	1.0 to 39.9999MHz	-----	3	10	mA	No load RL=∞ T=25°C
	40.0 to 79.9999MHz	-----	4	10		
	80.0 to 124.9999MHz	-----	5	10		
	125.0 to 150MHz	-----	6	10		
Output Voltage:	V_{OH}	0.8*V_{dd}	-----	-----	V	15pF
	V_{OL}	-----	-----	0.2*V_{dd}		
Rise Time:	Tr	-----	1.3	2.0	ns	15pF; T=25°C 20%/80%*VDD
Fall Time:	Tf	-----	1.3	2.0		
Output Load:		15pF max / 10kΩ min.			pF	See options
Symmetry:		45	-----	55	%	@1/2Vdd
Startup Time:		-----	1.5	3.0	ms	
Disable Time:		-----	20	100	ns	
Disable Stand-by Current:		-----	-----	1	uA	
Tri-state Function (Stand-by) :		"1" (VIH≥0.75*Vdd) or Open: Oscillation "0" (VIH<0.25*Vdd) : Hi Z			V	
Cycle to cycle jitter:		-----	95	-----	ps	F=100MHz
Aging:		-5.0	-----	+5.0	ppm	First year

Absolute Maximum Ratings

Item	Minimum	Maximum	Unit	Condition
Supply Voltage	-0.3	+4.0	V	
Input Voltage	-0.3	Vdd+0.3	V	
Junction Temp.	-----	+150	°C	
Soldering Temp.	-----	+260	°C	40sec max
ESD			V	
HBM		2,000		
MM		200		
CDM		500		

ABRACON LLC
The Power of Linking Together

5101 Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit: www.abracon.com

REVISED: 12.6.2017

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PLASTIC PACKAGE PURE SILICON™ CLOCK OSCILLATOR

ASFLM

Life Size

5.0 x 3.2 x 0.85mm

Pb RoHS/RoHS II Compliant

PART NUMBER FOR PROGRAMMED ORDER S

Programmed Orders (Quantity > 1,000pcs)

ASFLM □ - □ MHz - □□ - □

Supply Voltage
1: 3.0 ± 0.3V
2: 3.3 ± 0.3V
3: 2.5 ± 0.2V
4: 1.8 ± 0.15V
5: 2.8 ± 0.2V

Frequency in MHz
e.g. 14.3181 MHz (Maximum 4 digits after decimal)

Operating Temp.
Blank: 0°C ~ +70°C
E: -20°C ~ +70°C
L: -40°C ~ +85°C

Overall Freq. Stability
Blank: ±100ppm
R: ±25ppm
C: ±50ppm

Packaging
Blank*: 72pcs / Tube
T: 1,000pcs / reel
T3: 3,000pcs / reel

* For Quick turn-around programmable orders < 1000pcs: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as BULK: Cut Tape, Loose parts in Antistatic Bag or in Tube(s). The MOQ per the series will still apply for Tube packaging.

Un-Programmed Orders (Quantity < 1,000pcs)

Blank un-programmed oscillators are available for quick turn engineering requirements. Please call ABRACON for more information.

ASFLM - BLANK - □□ - □

Operating Temp. Freq. Stability
EC: ± 50 ppm / -20°C to +70°C
ER: ± 25 ppm / -20°C to +70°C
LC: ± 50 ppm / -40°C to +85°C
LR: ± 25 ppm / -40°C to +85°C

Packaging
Blank: 72pcs / Tube
T: 1,000pcs / reel
T3: 3,000pcs / reel

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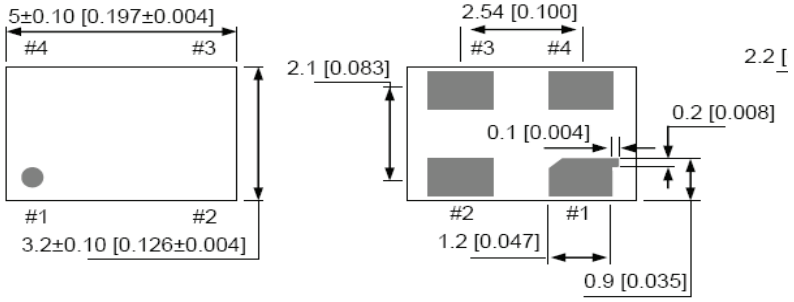
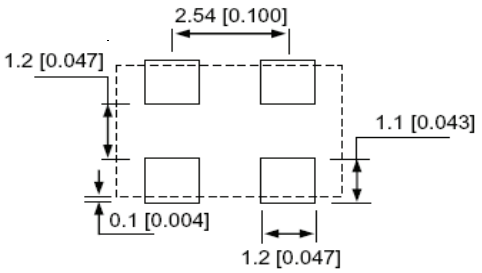
OUTLINE DRAWING:



No.	Pin Terminal
1	Standby
2	GND
3	Output
4	VDD

Recommended Land Pattern

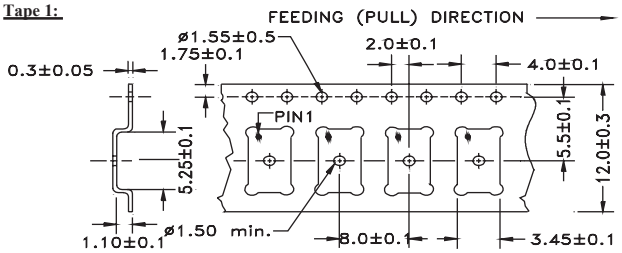


Note: Recommend using an approximately 0.01uF bypass capacitor between PIN 2 and 4.

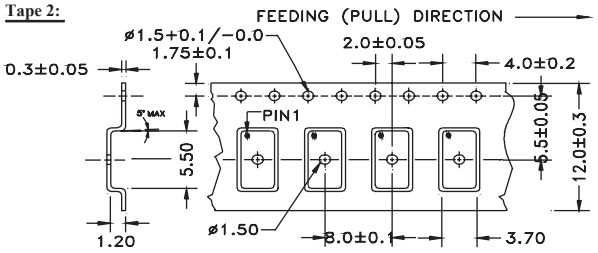
Dimensions: mm (Inches)

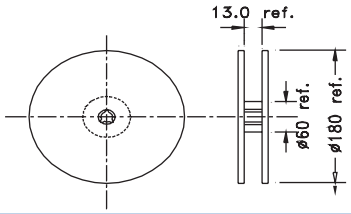
TAPE & REEL:

Tape 1:

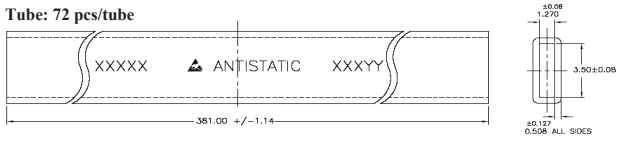


Tape 2:





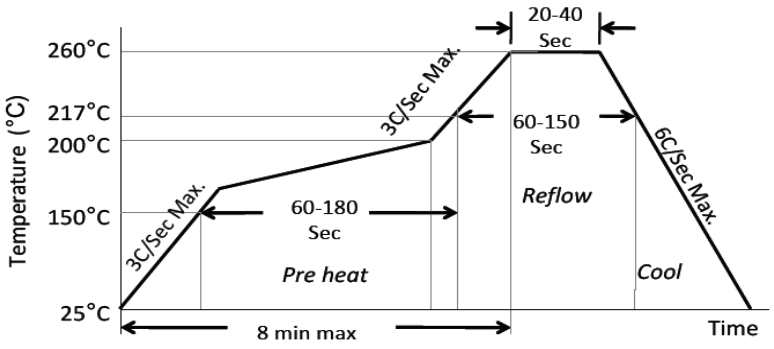
Tube: 72 pcs/tube



Unit orientation in tube:

Dimensions: mm

REFLOW PROFILE:



Ramp-Up Rate (200°C to Peak Temp)	3°C/Sec Max.
Preheat Time 150°C to 200°C	60-180 Sec
Time maintained above 217°C	60-150 Sec
Peak Temperature	255-260°C
Time within 5°C of actual Peak	20-40 Sec
Ramp-Down Rate	6°C/Sec Max.
Time 25°C to Peak Temperature	8 min Max.

Need a test socket for the ASFLM Series? To view compatible **PRECISION TEST & BURN-IN SOCKETS** for these parts, **click here. P/N: AXS-5032-04-07**

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