

ULTRA MINIATURE PLASTIC PACKAGE PURE SILICON™ CLOCK OSCILLATOR

ASFLM



Life Size



5.0 x 3.2 x 0.85mm

ASFLM

RoHS
Compliant

FEATURES:

- Ultra Miniature 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
- 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

MEMSPEED PRO™
Clock Oscillator Programmer
AVAILABLE NOW!

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ASFLM Series
Frequency range	1.000 MHz to 125 MHz(ASFLM1); 1.000 MHz to 150 MHz(ASFLM2 ~4)
Operating temperature	0°C to + 70°C (see options)
Storage temperature	-40°C to +155°C
Overall Frequency Stability	± 100 ppm max. (see options)
Supply Voltage (Vdd)	3.0 V ± 0.3 V (see options)
Supply Current (No Load)	6.0mA max (1.0 to 39.9999MHz) 7.0mA max (40.0 to 79.9999MHz) 10.0mA max (80.0 to 125MHz) (T=-40 to +85°C, Vdd=3.3 ± 0.3V, 3.0 ± 0.3V, 2.5 ± 0.2V, 1.8 ± 0.15V CL=15pF, RL=10kΩ)
Supply Current: (Full Load)	9.0mA max (1.0 to 39.9999MHz) 10.0mA max (40.0 to 79.9999MHz) 16.0mA max (80.0 to 125MHz) (T=-40 to +85°C, Vdd=3.3 ± 0.3V, 3.0 ± 0.3V, 2.5 ± 0.2V, 1.8 ± 0.15V CL=15pF, RL=10kΩ)
Symmetry	45/55 % max. @ 1/2Vdd
Rise and fall time (Tr/Tf)	5ns max. (+25°C, 15pF output load, 10/90% Vdd.)
Output load	15 pF max., 10k ohms min.
Output voltage:	VOH = 0.9* Vdd min. ; VOL = 0.1* Vdd max.
Input voltage:	VIH = 0.9* Vdd min. ; VIL = 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. (T= +25°C, Vdd=3.3 ± 0.3V, 3.0 ± 0.3V, 2.5 ± 0.2V, 1.8 ± 0.15V)
Aging at +25°C/year	± 5ppm max.
Jitter	1MHz: 181ps typ.(RMS Jitter); 1.6ns typ.(Pk-Pk Jitter) 26MHz: 17.8ps typ.(RMS Jitter); 138ps typ.(Pk-Pk Jitter) 100MHz: 8.4ps typ.(RMS Jitter); 106ps typ.(Pk-Pk Jitter) 150MHz: 9.9ps typ.(RMS Jitter); 82ps typ.(Pk-Pk Jitter)

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PART NUMBER FOR PROGRAMMED ORDERES

ASFLM□ - Frequency - □ - □ - □

Supply Voltage		Frequency	Operating Temp.		Freq. Stability		Packaging	
1	3.0 ± 0.3V		XXX.XXX MHz	Blank	0°C to +70°C	Blank	± 100 ppm	Blank
2	3.3 ± 0.3V	M		-20°C to +85°C	C	± 50 ppm		
3	2.5 ± 0.2V	L		-40°C to +85°C	K	± 30 ppm	T	Tape and Reel (1000pcs/reel)
4	1.8 ± 0.15V							

Please contact Abracon for order assistance for high shock application.

PART NUMBER FOR UN-PROGRAMMED ORDERES

Blank un-programmed oscillators and our low cost portable programmers are available for quick turn engineering requirements. Please call ABRACON or visit **MEMSpeed Pro** site <http://www.abracon.com/memspeedpro/memspeedpro.html> for more information.

ASFLM - BLANK - □□ - □

Operating Temp. Freq. Stability		Packaging	
EK	± 30 ppm / -20°C to +70°C	Blank	Tube (72pcs/tube)
LC	± 50 ppm / -40°C to +85°C	T	Tape and Reel (1000pcs/reel)

MEMSPEED PRO™ Clock Oscillator Programmer

Our new MEMSpeed Pro Clock Oscillator Programmer allows you to program parts to any frequency between 1 and 150 Mhz in 1 second! Order online now at www.abracon.com.



ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



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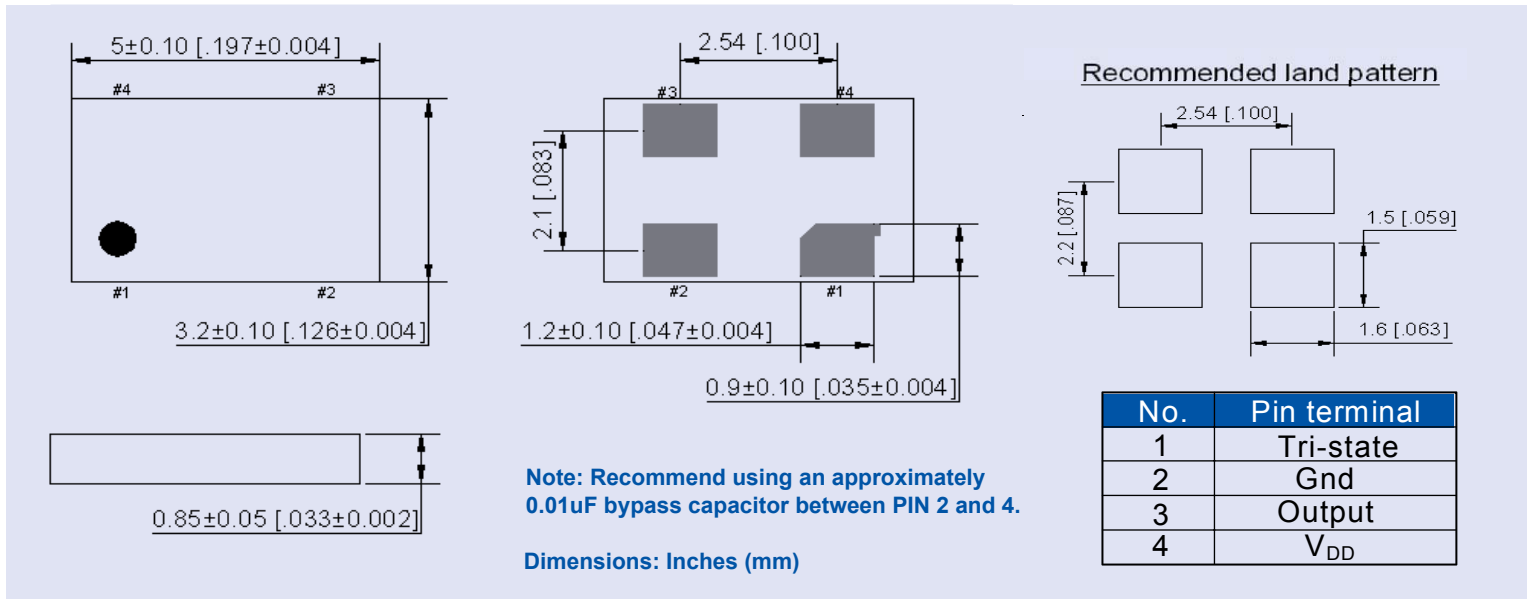


Life Size 
5.0 x 3.2 x 0.85mm

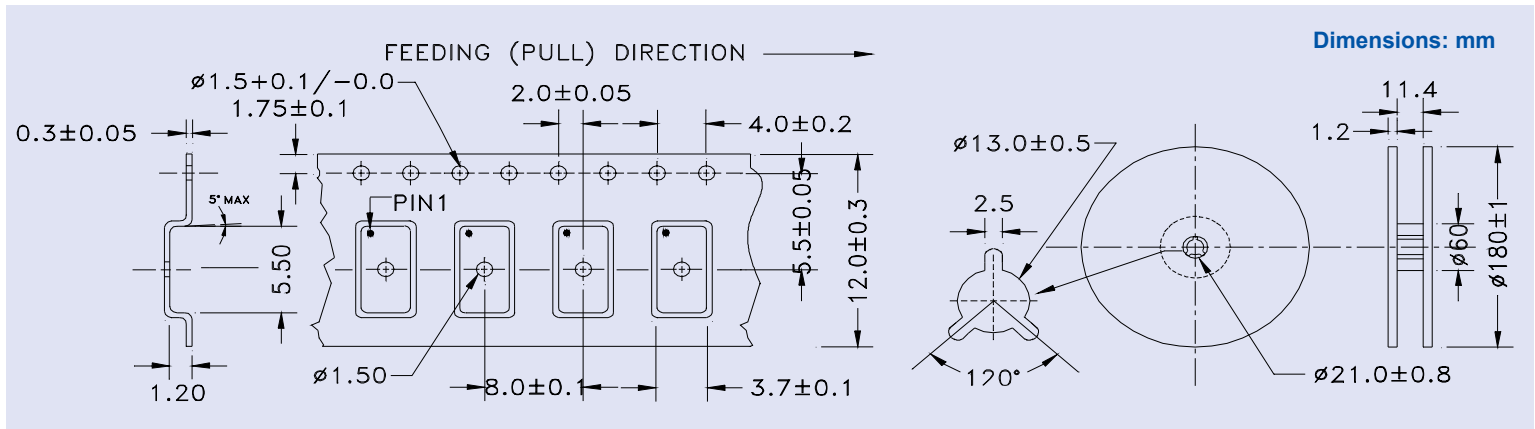
ASFLM



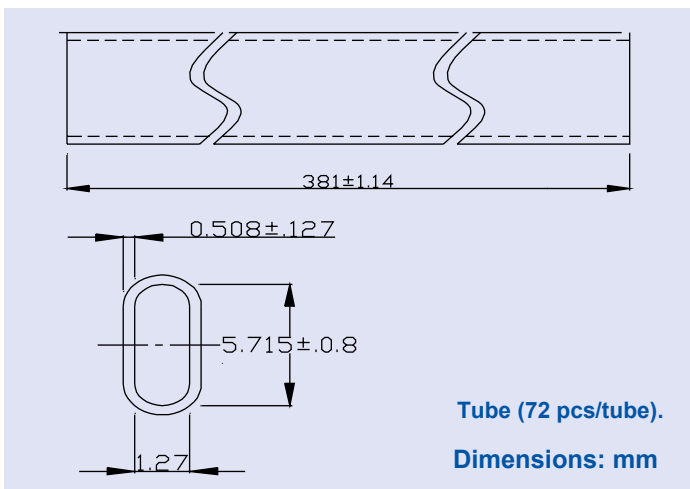
OUTLINE DRAWING:



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



TUBE PACKAGING:



REFLOW

