MEMS CLOCK OSCILLATOR

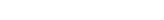
ASFLM

FEATURES:

- Low Power Consumption
- Low Stand by Current
- Exceptional Stability Over Temp. at -40°C to +85°C

STANDARD SPECIFICATIONS:

- 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

V

ps

ppm

Notes

F=100MHz

First year

(Pb) RoHS/RoHS II Compliant

• Demanding Military & Automotive Electronics

Parameters		Minimum	Typical	Maximum	Units	Notes	
Frequency Range	e:		1.0		150	MHz	
Operating Tempe	erature:		0		+70	°C	See options
Storage Temperature:			-55		+150	°C	
Supply Voltage (Vdd):			+1.8~+3.3				See options
Supply Current (no load):	1.0 to 39.9999MHz			7	15	mA	Vdd=3.3V
	40.0 to 79.9999MHz			8	15		No load
	80.0 to 124.9999MHz			9	15		RL=∞
	125.0 to 1501	MHz		10	15		T=25°C
Output Valtage:		V _{OH}	0.8*V _{dd}				
Output Voltage:		V _{OL}			$0.2*V_{dd}$	V	15pF
Rise Time:		Tr		1.3	3.0		15pF; T=25°C
Fall Time:		Tf		1.3	3.0	ns	20%/80%*VDD
Output Load:		$15 pF max / 10 k\Omega min.$			pF	See options	
Symmetry:			45		55	%	@1/2Vdd
Startup Time:				1.5	3.0	ms	
Disable Time:				20	100	ns	
Disable Stand-by Current:				15	uA		

-5.0

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		

"1" (VIH ≥ 0.75*Vdd) or Open: Oscillation

"0" (VIH<0.25*Vdd) : Hi Z

60



Tri-state Function (Stand-by) :

Cycle to cycle jitter:

Aging:

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

+5.0

REVISED: 1.4.2021



Life Size

ASFLM

5.0 x 3.2 x 0.85 mm

MEMS CLOCK OSCILLATOR



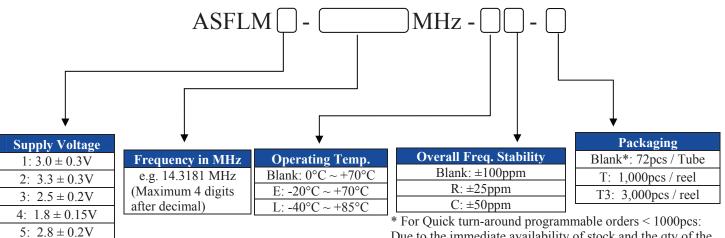
5.0 x 3.2 x 0.85 mm

ASFLM

(Pb) RoHS/RoHS II Compliant

> PART NUMBER FOR PROGRAMMED ORDER S

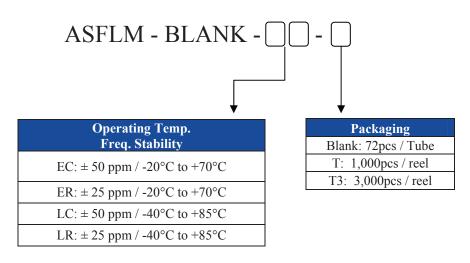
Programmed Orders (Quantity > 1,000pcs)



* 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.





REVISED: 1.4.2021

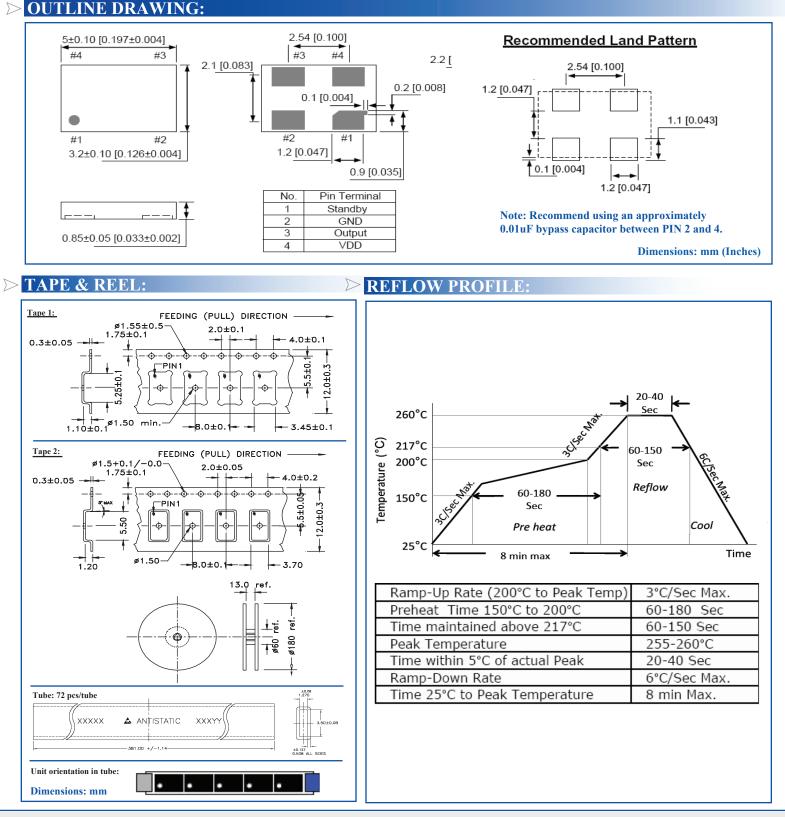
MEMS CLOCK OSCILLATOR

(Pb) RoHS/RoHS II Compliant

Life Size

ASFLM

ASFLM



ATTENTION: Abracon LLC's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependent Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon LLC is required. Please contact Abracon LLC for more information.



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



ABRACON IS ISO9001-2015 CERTIFIED