MEMS CLOCK OSCILLATOR

ASFLM





FEATURES:

- Low Power Consumption
- Low Stand by Current
- Exceptional Stability Over Temp. at -40°C 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		
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		$RL=\infty$
	125.0 to 150N	MHz		10	15		T=25°C
Outrast Waltern		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:		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:				15	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:				60		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		



REVISED: 1.4.2021

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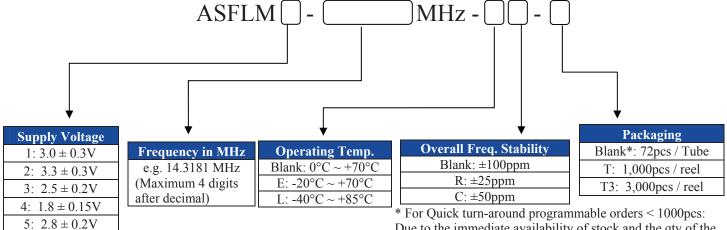






> PART NUMBER FOR PROGRAMMED ORDER S

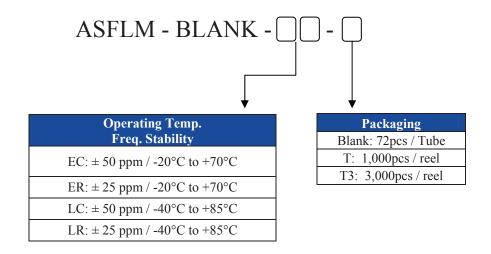
Programmed Orders (Quantity > 1,000pcs)



* 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.





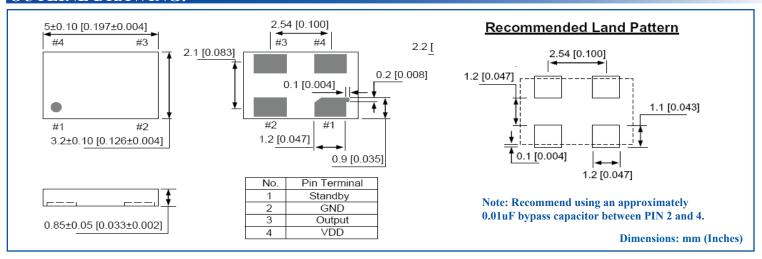
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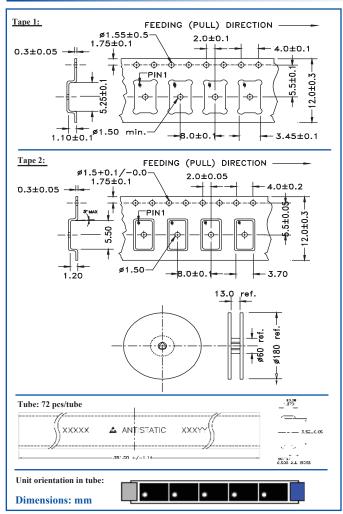


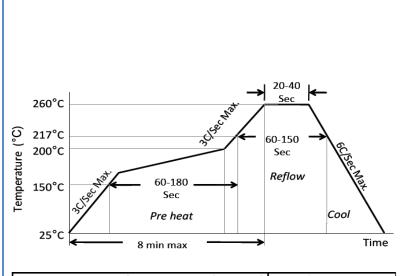
OUTLINE DRAWING:



> TAPE & REEL:

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.		

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