# **MEMS CLOCK OSCILLATOR**



7.0x 5.0 x 0.85 mm

### (Pb) RoHS/RoHS II Compliant

#### **FEATURES:**

• Low Power Consumption

**ASVM** 

- 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

$\triangleright$	<b>STANDARD</b>	<b>SPECIFICATIONS:</b>
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Parameters			Minimum	Typical	Maximum	Units	Notes
Frequency Range	e:		1.0		150	MHz	
Operating Temperature:			0		+70	°C	See options
Storage Temperature:			-55		+150	°C	
Supply Voltage (Vdd):			+1.8~+3.3			V	See options
	1.0 to 39.9999MHz			7	15	mA	Vdd=3.3V No load
Supply Current	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
Orthough Walter and	-	V <sub>OH</sub>	0.8*V <sub>dd</sub>				
Output voltage.		V <sub>OL</sub>			0.2*V <sub>dd</sub>	V	15pF
Rise Time: Tr		Tr		1.3	3.0		15pF; T=25°C
Fall Time:		Tf		1.3	3.0	ns	20%/80%*VDD
Output Load:			15pF max / $10k\Omega$ 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	
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		



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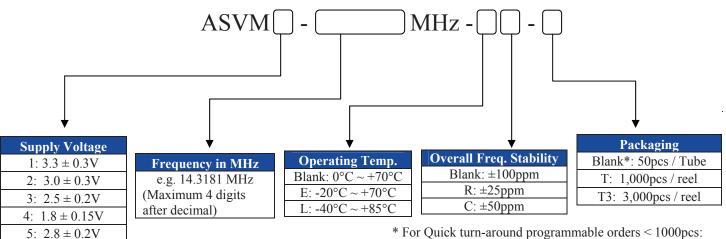
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#### PROGRAMMED ORDERS (QUANTITY > 1,000PCS)

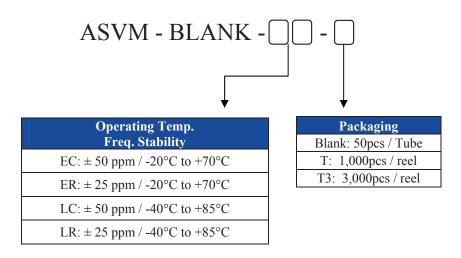


\* For Quick turn-around programmable orders < 1000pcs: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as BULK: Cut Tape, Loose parts in Antistatic Bag or in Tube(s). The MOQ per the series will still apply for Tube packaging.

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

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





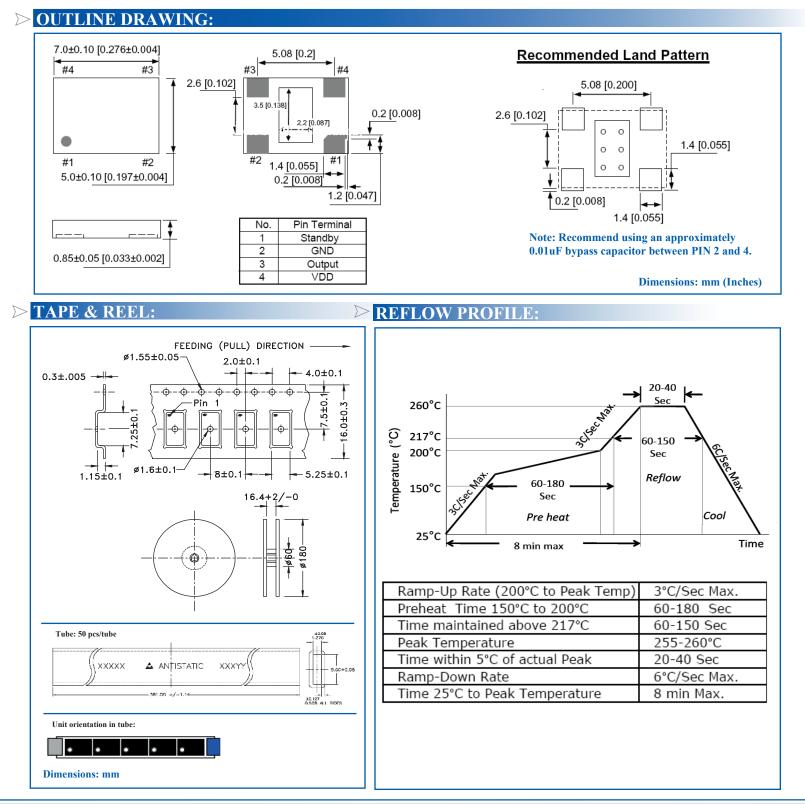
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