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 | 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 | | | V | See options |
| | 1.0 to 39.9999MHz | | | 7 | 15 | | Vdd=3.3V No load |
| Supply Current | 40.0 to 79.9999MHz | | | 8 | 15 | | |
| (no load): | 80.0 to 124.9999MHz | | | 9 | 15 | mA | RL=∞ |
| | 125.0 to 150MHz | | | 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: | | | 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 | | |



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: 1.4.2021

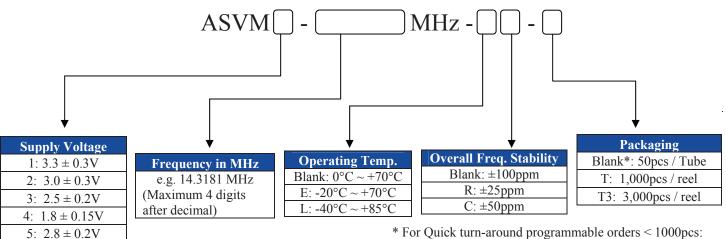
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ASVM



7.0x 5.0 x 0.85 mm

PROGRAMMED ORDERS (QUANTITY > 1,000PCS)

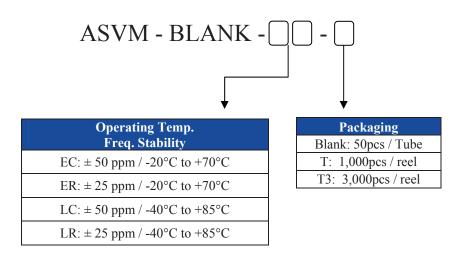


* For Quick turn-around programmable orders < 1000pcs: Due to the immediate availability of stock and the qty of the order, the parts may be delivered as BULK: Cut Tape, Loose parts in Antistatic Bag or in Tube(s). The MOQ per the series will still apply for Tube packaging.

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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.





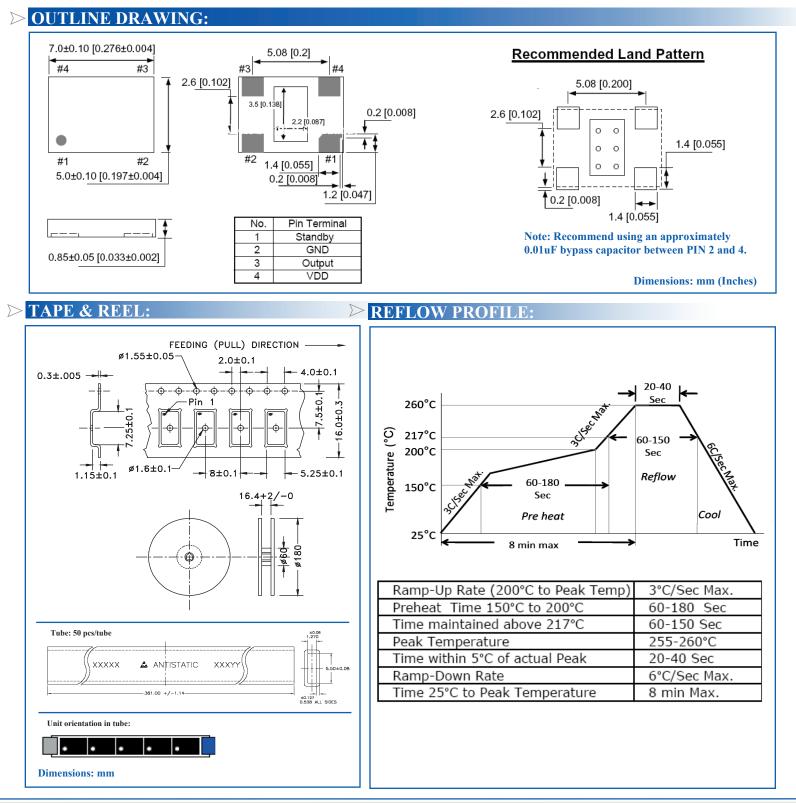
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ABRACON IS ISO9001-2015 CERTIFIED ASVM



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