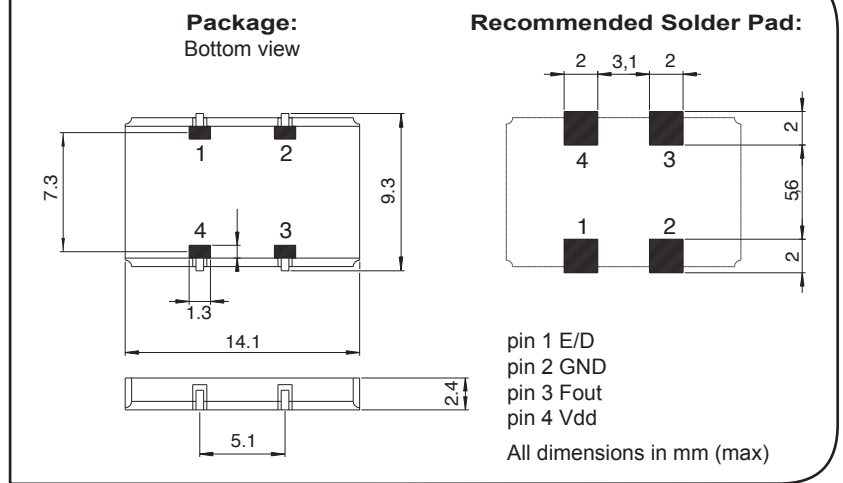


**DIMENSIONS**



- SMT Clock oscillator in ceramic package
- Fundamental quartz mode frequency
- High shock and vibration resistance
- Wide temperature range
- Low aging
- Ultra low MSL
- Very fast start-up
- Swiss made quality
- Customer specification on request

**DESCRIPTION:**

This SMD oscillator in ceramic package has been specially designed for surface mount using infrared, vapor phase or epoxy techniques.

**APPLICATIONS:**

- Avionics
- Airbone equipments
- Remote control
- Security application
- Radio Transceiver
- Microprocessor clocks

The MCSO's are supplied on trays (50 pcs / tray)  
For pick-and-place equipment, the parts are available in 24mm tapes with 250 parts min  
500 parts max

**ELECTRICAL CHARACTERISTICS AT +25°C**

<b>Frequency stability</b> Over temperature range (see ordering info) Including: adjustment at +25°C long term aging 10 years over supply voltage ±5% over load min to max	$\Delta F/F$	$\leq \pm 100$	ppm
<b>Frequency stability version T</b> Over temperature range (see ordering info) Including: adjustment at +25°C long term aging 1 year over supply voltage ±5% over load min to max	$\Delta F/F$	$\leq \pm 50$	ppm
Supply voltage ± 5% 1)*	Vdd	2.5 / 3.3	V
Input current	Idd	see table 1	
Output signal		HC-MOS compatible	
Symmetry at Vdd/2		40 / 60	%
Rise & fall time $\leq 20$ MHz (load 15pf 20% to 80%)		$\leq 7$	ns
Rise & fall time $\geq 20$ MHz (load 15pf 10% to 90%)		$\leq 3$	ns
Level "0" & "1"		$<0.4>V_{dd}-0.5$	V
Start-up time (typ/max)	t	1/5	ms
Load min / max		3/47	pF
Jitter $\leq 20$ MHz one sigma		$<2$ rms	ps
Jitter $> 20$ MHz one sigma		$<10$ rms	ps

\* 1) C = 47nF ceramic must be connected between GND & Vdd

