

The ECS-327MVATX is a miniature SMD 32.768 KHz Oscillator with Multi Volt capability of 1.6 ~ 3.6 V. Available in 5 industry standard Packages the ECS-327MVATX is ideal for RTC, Low Power/Portable, Industrial and IOT. applications.

ECS-327MVATX

32.768 KHz

SMD Multi Volt Crystal Oscillator

[Request a Sample](#)



OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-327MVAT			UNITS
		MIN	TYP	MAX	
Frequency Range			32.768		KHz
* Frequency Stability	-40 ~ +85°C (CN Opt)			±25	ppm
Supply Voltage		1.6		3.6	V
Supply Current				200	µA
Output Load	CMOS			15	pF
Output Voltage	V _{OH}	0.9*V _{dd}			V
	V _{OL}			0.1*V _{dd}	V
Tri-State Function	"1" V _{IH} ≥ 0.7*V _{dd} =Oscillation				
	"0" V _{IL} ≤ 0.3*V _{dd} =High Impedance				
Rise & Fall time	10%V _{dd} – 90%V _{dd}			30	ns
Start Up Time				5	mS
Phase Jitter (RMS)				1	pS
Duty Cycle	@ ½ V _{dd}			45/55	%
Standby Current				10	µA
Aging	@+25°C			±3	ppm
Operating Temp*	(N Opt)	-40		+85	°C
Storage Temp		-55		+125	°C

- Low Current
- Extended Temp Range
- RoHS Compliant
- Multi Volt 1.6 ~ 3.6V Supply Voltage
- Tight Stability

PART NUMBERING GUIDE: Example ECS-327MVATX-2-CN-TR

ECS	-	SERIES	-	PACKAGE SIZE	-	* STABILITY	-	TEMP RANGE	-	PACKAGING
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327MVATX
32.768 KHz
Multi Volt Oscillator

1 = 2.0 x 1.6 mm
2 = 2.5 x 2.0 mm
3 = 3.2 x 2.5 mm
5 = 5.0 x 3.2 mm
7 = 7.0 x 5.0 mm

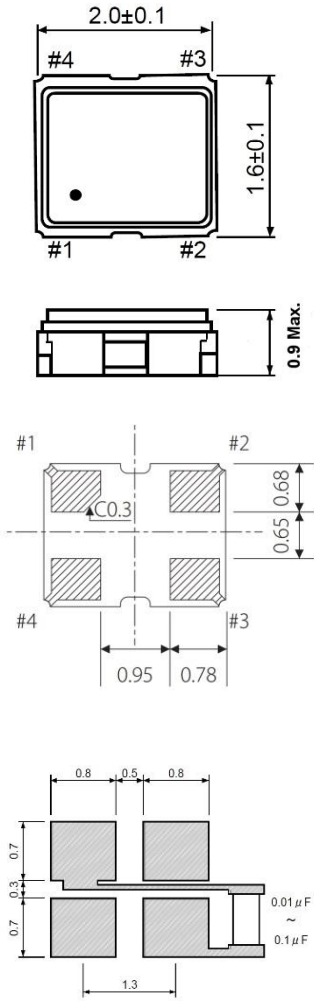
A = ±100 ppm
B = ±50 ppm
C = ±25 ppm
D = ±20 ppm

L = -10 ~ +70°C
M = -20 ~ +70°C
N = -40 ~ +85°C

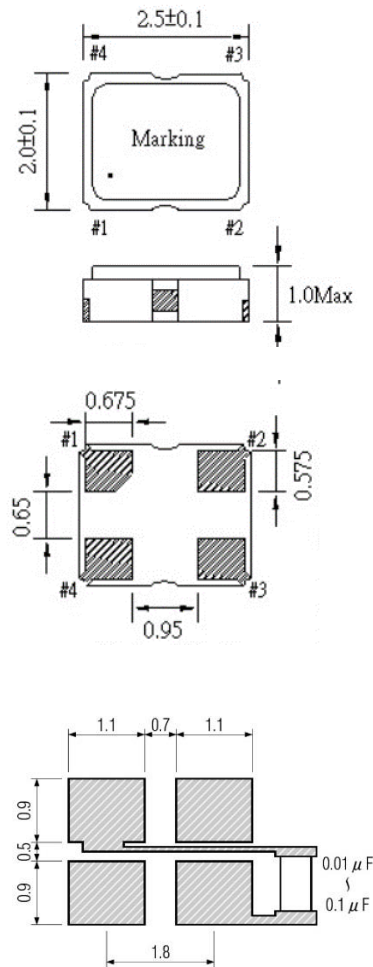
-TR =
Tape
& Reel
1K/Reel

* Frequency Stability includes initial tolerance, temperature, supply voltage & load change reflow frequency shift.

1 = 2.0 x 1.6 Package



2 = 2.5 x 2.0 Package



3 = 3.2 x 2.5 Package

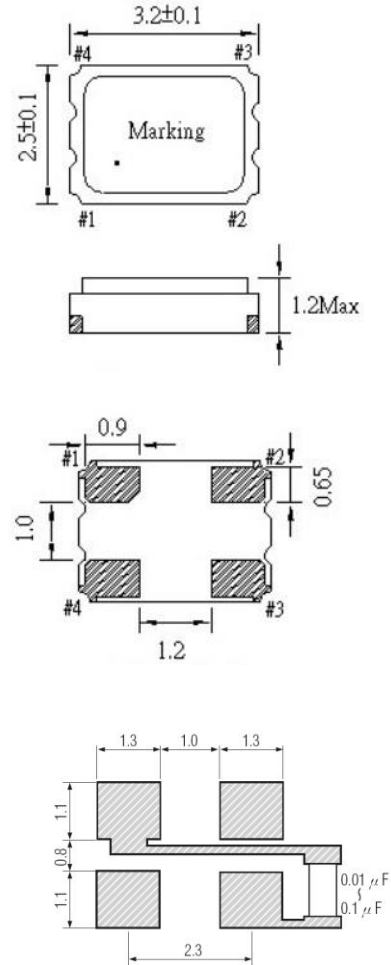


Figure 1) Top, Side, Bottom views and Suggested Land

Figure 2) Top, Side, Bottom views and Suggested Land

Figure 3) Top, Side, Bottom views and Suggested Land

PAD CONNECTIONS	
1	Tri-state
2	Gnd
3	Output
4	Vdd

5 = 5x3.2 Package

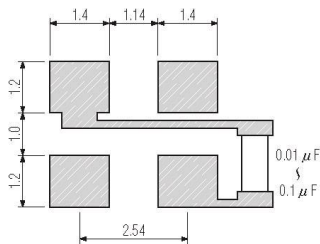
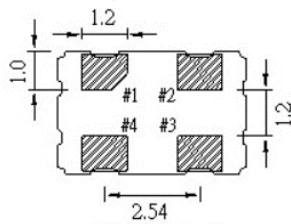
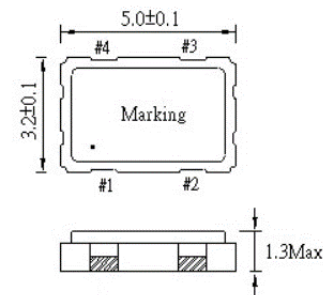


Figure 4) Top, Side, Bottom views and Suggested Land

7 = 7x5 Package

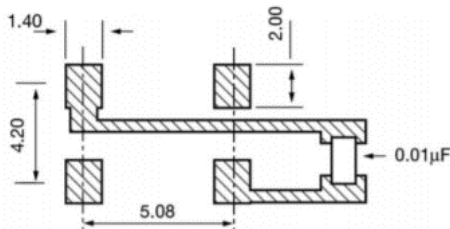
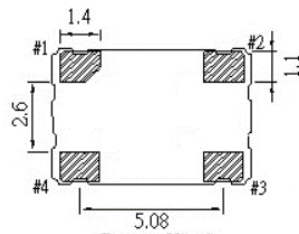
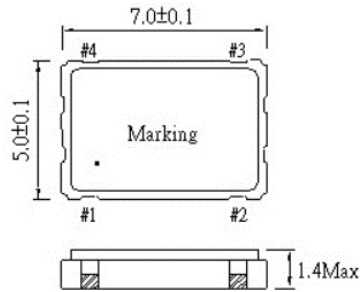


Figure 5) Top, Side, Bottom views and Suggested Land

PAD CONNECTIONS	
1	Tri-state
2	Gnd
3	Output
4	Vdd