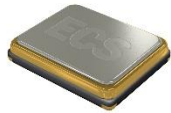


The ECS-327MV is a miniature AT-cut 32.768 KHz SMD CMOS Oscillator with Multi Volt capability of 1.6 ~ 3.6 V. The 1.6 x 1.2 x 0.7 mm ceramic package is ideal for Low Power/Portable, Industrial and IOT.

[Request a Sample](#)

ECS-327MV SMD XO



- 1.6 x 1.2 mm Footprint
- Extended Temp Range
- RoHS Compliant
- Wide Supply Voltage
- Low Current

DIMENSIONS (mm)

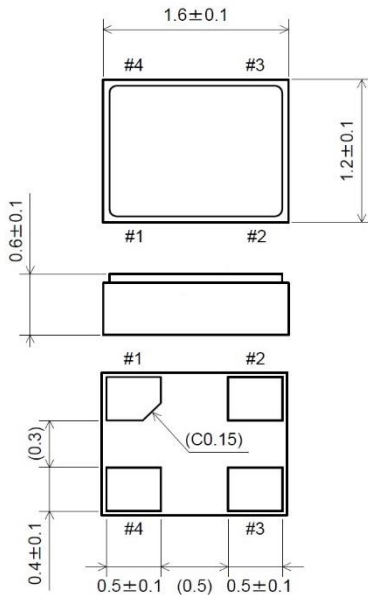


Figure 1) Top, Side, and Bottom views

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-327MV			UNITS
		MIN	TYP	MAX	
Frequency Range			32.768		KHz
* Frequency Stability	-40 ~ +85°C (CN Opt)			±25	ppm
Supply Voltage		1.6		3.63	V
Output Load	CMOS			15	pF
Output Voltage Level	Vol: 0.1 Max./Voh:0.9Vdd Min. V				
Rise & Fall time	10%Vdd – 90%Vdd			200	ns
Start Up Time	VDD 1.8V			10	mS
Duty Cycle	@ ½ Vdd			45/55	%
Current Consumption	Vdd 3V (No Load)			0.03	mA
Standby Current				3	µA
Operating Temp*	N Option	-40		+85	°C
Storage Temp		-40		+105	°C

PAD CONNECTIONS

1	Stand-by
2	Gnd
3	Output
4	Vdd

Tri State Function

Pin 1	Output
0.7 * Vdd Min	Active
0.3 * Vdd Max.	High-Z

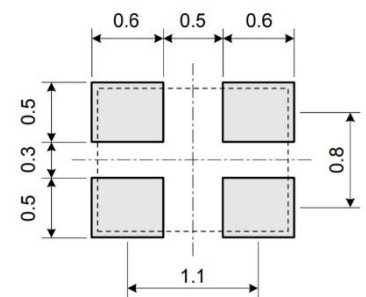


Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE: Example ECS-327MV-CN-TR

ECS

-

SERIES

-

* STABILITY

TEMP RANGE -

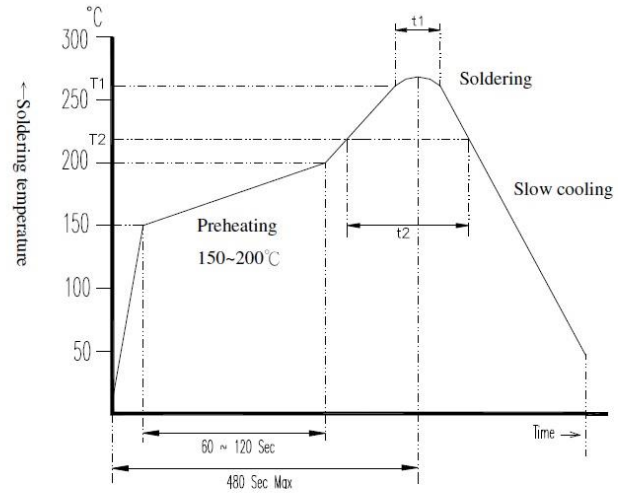
PACKAGING

327MV
1.6 x 1.2 mm
Multi Volt Oscillator
32.768 KHz

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

M = -20 ~ +70°C
N = -40 ~ +85°C

-TR =
Tape
& Reel
3K/Reel



Application\Temperature	Time	T1 / t1	T2 / t2
Lead Free	260±5°C / 10±5 Sec Max	217°C Min / 60~150 Sec	
Non Lead Free	240±5°C / 10±5 Sec Max	183°C Min / 60~150 Sec	

SOLDER PROFILE
Peak solder Temp +260°C ±5°C 10 ±5 Sec Max.
2 Cycles Max.
MSL 1, Lead Finish Au

Figure 1) Suggested Reflow Profile

POCKET TAPE DIMENSIONS (mm)

