ECS-327MV

SMD MultiVolt™ Crystal Oscillator

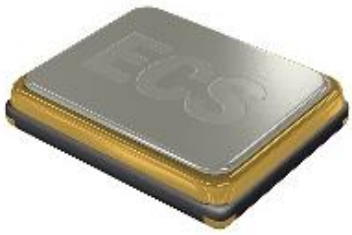
RoHS COMPLIANT

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

Request a Sample

ECS INC INTERNATIONAL®

ECS-327MV SMD XO



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

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:0.9 Vdd 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

DIMENSIONS (mm)

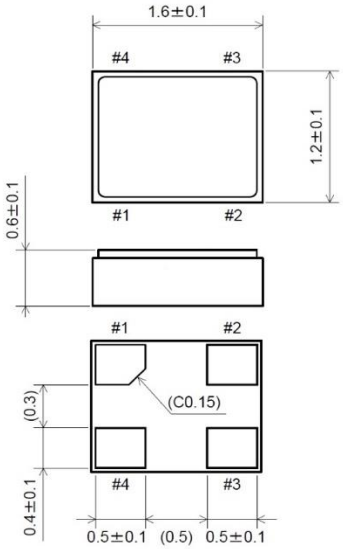


Figure 1) *Top, Side, and Bottom views*

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

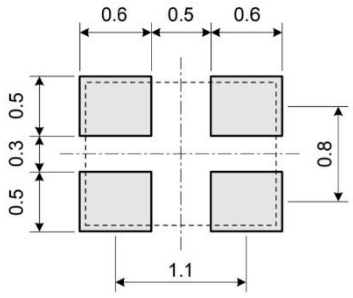


Figure 2) *Suggested Land Pattern*

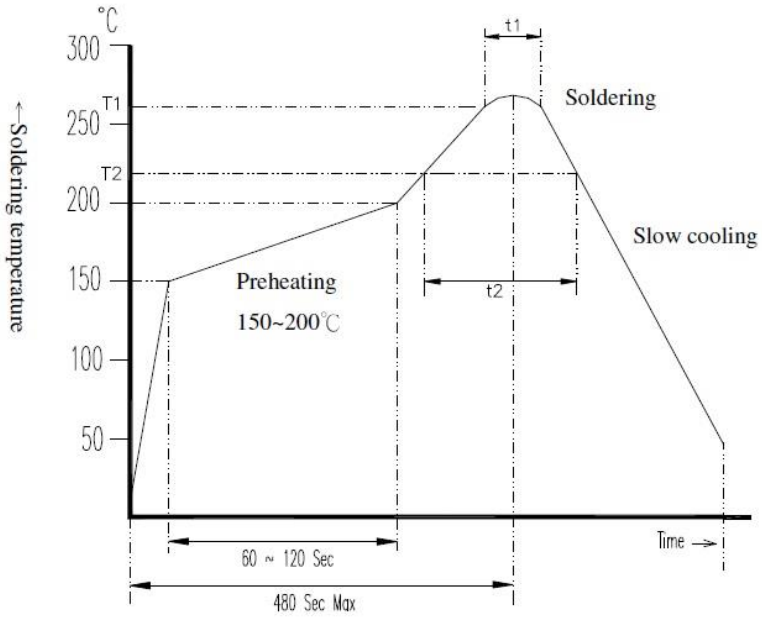
PART NUMBERING GUIDE: Example ECS-327MV-CN-TR

ECS -	SERIES	-	* STABILITY	TEMP RANGE	-	PACKAGING
	327MV 1.6 x 1.2 mm MultiVolt™ 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

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

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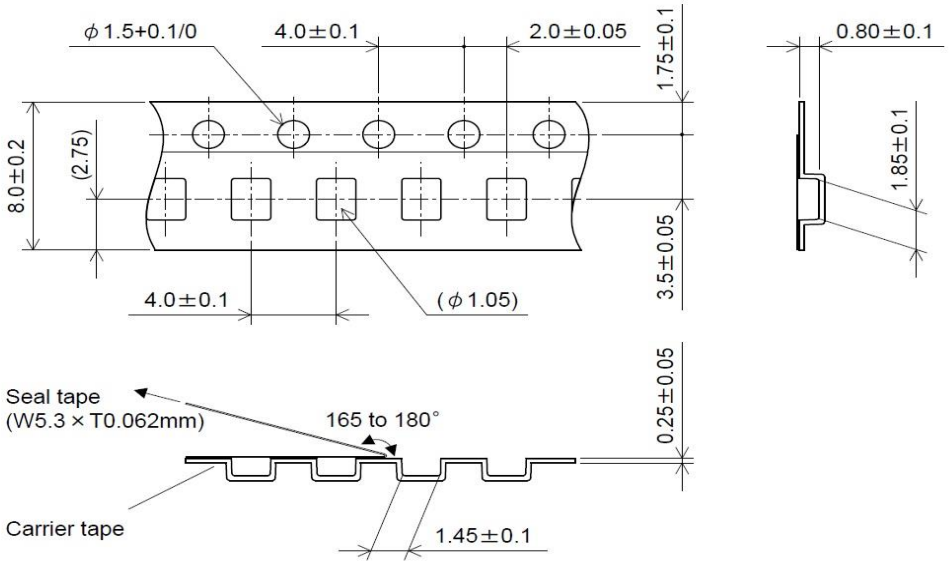
SOLDER PROFILE
Peak solder Temp +260°C ±5°C 10 ±5 Sec Max.
2 Cycles Max.
MSL 1, Lead Finish Au



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

POCKET TAPE DIMENSIONS (mm)

Unit : mm



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ECS:
ECS-327MV-CN-TR