



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

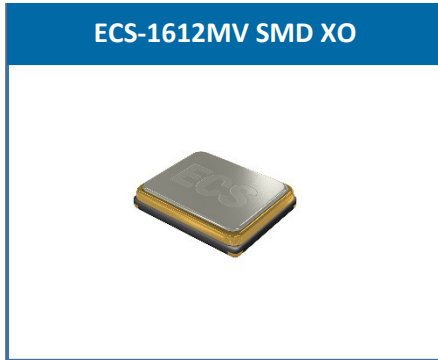
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



The ECS-1612MV is a miniature SMD HCMOS Oscillator with Multi Volt 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.

Request a Sample



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

DIMENSIONS (mm)

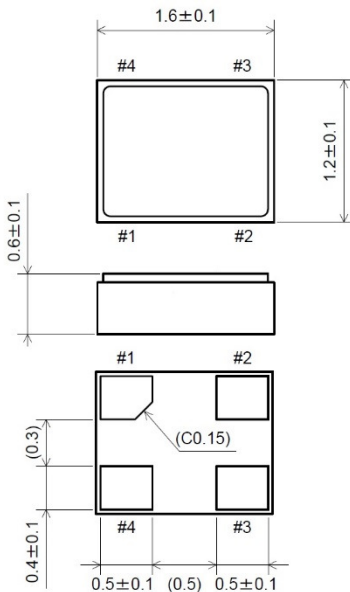


Figure 1) Top, Side, and Bottom views

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-1612MV			UNITS
		MIN	TYP	MAX	
Frequency Range		3.000		80.000	MHz
* 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: 0.4 Max./VOH: Vdd-0.4 Min.V DC				
Rise & Fall time	10%V _{dd} - 90%V _{dd}			4.5	ns
Start Up Time	V _{DD} 1.8V			5	mS
Phase Jitter	12 KHz to 5 MHz			1	pS
Duty Cycle	@ ½ V _{dd}			45/55	%
Standby Current				10	µA
Operating Temp*	N Option	-40		+85	°C
Storage Temp		-40		+105	°C

CURRENT CONSUMPTION mA

FREQ.	~ 20 MHz	~ 50 MHz	~ 80 MHz
+1.8V	2 Typ./2.5 Max.	2.5 Typ./ 3 Max.	3 Typ./4 Max.
+2.5V	2 Typ./3 Max.	2.5 Typ./ 4 Max.	3 Typ./5 Max.
+3.3V	3 Typ./4 Max.	4 Typ./ 5 Max.	5 Typ./7 Max.

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

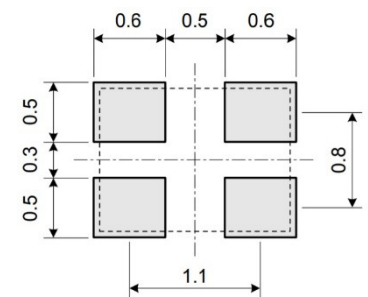


Figure 2) Suggested Land Pattern

PART NUMBERING GUIDE: Example ECS-1612MV-250-CN-TR

ECS	SERIES	FREQUENCY ABBREVIATION	* STABILITY	TEMP RANGE -	PACKAGING
	1612MV 1.6 x 1.2 mm Multi Volt Oscillator	250 = 25.000 MHz See Developed Frequencies Pg.2	A = ±100 ppm B = ±50 ppm G = ±30 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 & load change reflow frequency shift, and aging.



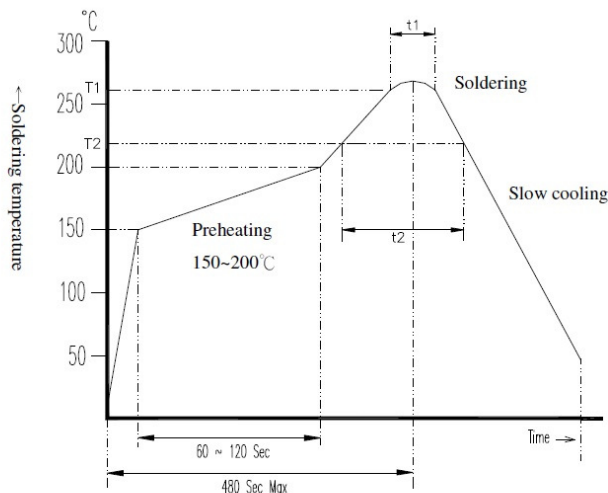
ECS-1612MV SMD Multi Volt Crystal Oscillator



DEVELOPED FREQUENCIES

CODE	FREQUENCY MHz
80	8.000
120	12.000
122.8	12.288
192	19.200
240	24.000
250	25.000
260	26.000
500	50.000

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 Sec Max	217°C Min / 60~150 Sec
Non Lead Free	240±5°C / 10±5 Sec Max	183°C Min / 60~150 Sec

Figure 1) Suggested Reflow Profile

POCKET TAPE DIMENSIONS (mm)

