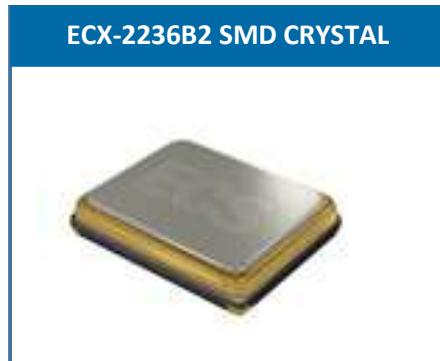


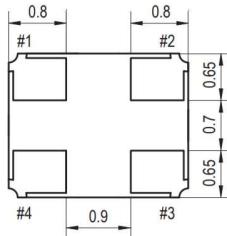
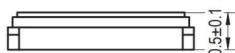
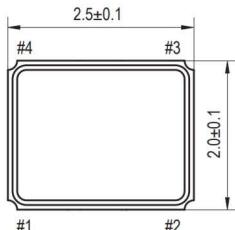
The miniature ECX-2236B2 is a compact SMD Crystal that offers low aging of ± 2 ppm first year. The industry standard 2.5 x 2.0 x 0.55 mm ceramic package is ideal for wireless applications.

ECX-2236B2 SMD CRYSTAL

[Request a Sample](#)


- Low Profile
- 2.5 x 2.0 mm Footprint
- Extended Temp. Range
- IOT/Wearable applications

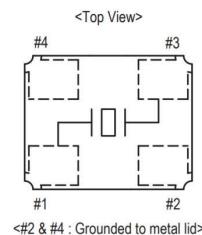
DIMENSIONS (mm)



OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-2236B2			UNITS
		MIN	TYP	MAX	
Frequency		12.000		50.000	MHz
Mode of Oscillation	Fundamental				
Frequency Tolerance*	@ +25°C (C option)			± 10	ppm
Frequency Stability*	-30 ~ +85°C (KY option)			± 10	ppm
Shunt Capacitance	C ₀			3	pF
Load Capacitance	Specify in P/N		8		pF
Drive Level	D _L			100	μW
Operating Temperature*	T _{opr} (Y option)	-30		+85	°C
Storage Temperature	T _{stg}	-55		+125	°C
Aging (First Year)	@ +25°C ±3°C			± 2	ppm

Frequency (MHz)	ESR Ω Max.
12.000 ~ 15.999	130
16.000 ~ 19.999	70
20.000 ~ 29.999	50
30.000 ~ 39.999	40
40.000 ~ 50.000	30



Pad Connections	
1	In/Out
2	Gnd
3	Out/In
4	Gnd

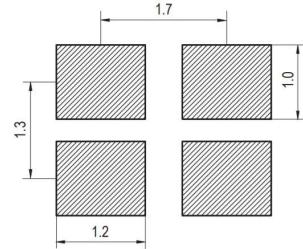


Figure 1) Top, Side, and Bottom

Crystal is symmetrical, pad 1 & 3 are interchangeable.

Chamfer on the bottom pad has no electrical significance.

PART NUMBERING GUIDE: Example ECS-240-8-36B2-CKY-TR

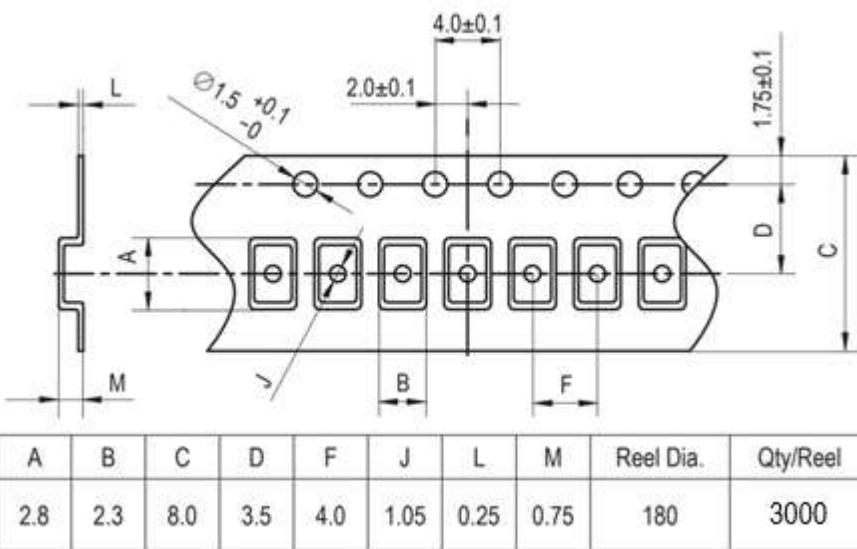
ECS - FREQUENCY ABBREVIATION		PACKAGE		AVAILABLE OPTIONS		
				Tolerance	Stability	
ECS	240 = 24.000 MHz See P/N Guide	8 = 8 pF 10=10 pF	-36B2 = ECX-2236B2	Blank = Std A = ± 25 ppm J = ± 20 ppm R = ± 15 ppm C = ± 10 ppm 7 = ± 7 ppm	Blank= Std D = ± 100 ppm E = ± 50 ppm G = ± 30 ppm H = ± 25 ppm T = ± 20 ppm † W = ± 15 ppm † K = ± 10 ppm †	Blank= Std L = -10 ~ +70°C M = -20 ~ +70°C Y = -30 ~ +85°C N = -40 ~ +85°C P = -40 ~ +105°C S = -40 ~ +125°C
					TR = Tape & Reel 3K/Reel	

* Specify available options in P/N.

† Contact ECS for availability over extended temp range.

Rev.2021

POCKET TAPE DIMENSIONS (mm)



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

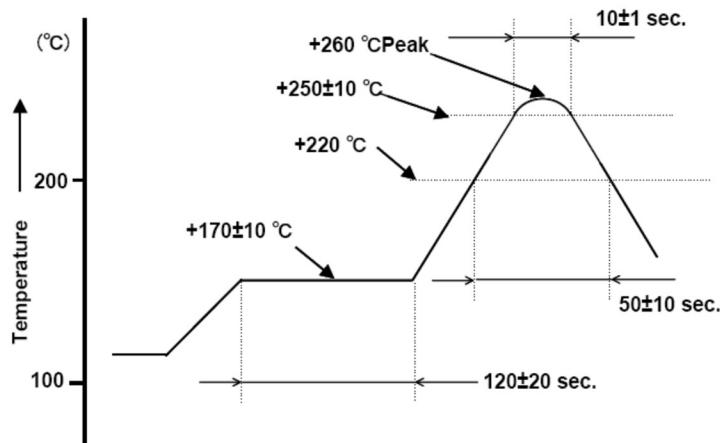


Figure 1) Suggested Reflow Profile