

The ultra-miniature 4-Pad ECX-1210B2 is a very compact SMD Tuning Fork Crystal. The 1.2 x 1.0 x 0.5 mm ceramic package is the smallest in it's class. This is very popular with small wearables and medical devices.

[Request a Sample](#)

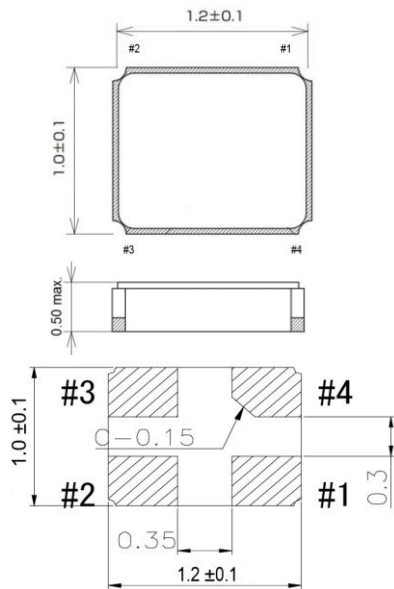


OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

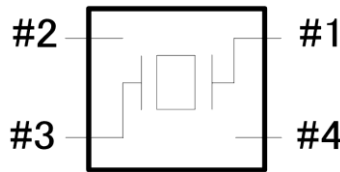
PARAMETERS	CONDITIONS	ECX-1210B2			UNITS
		MIN	TYP	MAX	
Frequency			32.768		KHz
Frequency Tolerance*	@ +25°C			± 20	ppm
Load Capacitance	Specify in P/N		12.5		pF
Drive Level	DL		0.1	0.3	μW
Equivalent Series Resistance	R1			90K	Ω
Turnover Temperature		+20	+25	+30	°C
Temperature Coefficient		-0.02	-0.03	-0.04	ppm/°C ²
Shunt Capacitance	Co		1.5		pF
Aging (First Year)	@ +25°C ±3°C			±3	ppm
Operating Temperature*	T _{opr}	-40		+105	°C
Storage Temperature	T _{stg}	-40		+105	°C

- Low Power RTC Applications such as STM32 [AN2867](#)
- 1.2 x 1.0 mm Footprint
- Applications: Smartphones, wireless modules, wearable devices

DIMENSIONS (mm)



* Specify options in part number



PAD CONNECTIONS	
#1	Crystal
#2	Ground
#3	Crystal
#4	Ground

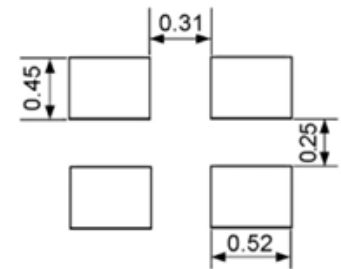


Figure 2) Suggested Land Pattern

Figure 1) Top, Side, and Bottom views

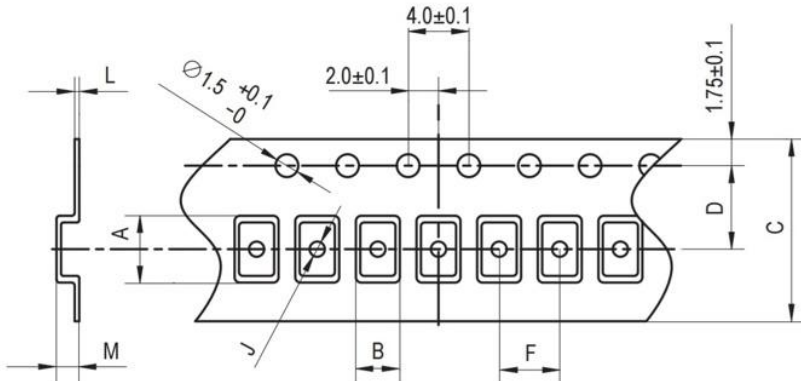
PART NUMBERING GUIDE: Example ECS-.327-12.5-1210B2-N-TR

ECS - FREQUENCY ABBREVIATION	LOAD CAPACITANCE	PACKAGE	CUSTOM OPTIONS Tolerance	PACKAGING Operating Temp
ECS	12.5 = 12.5 pF 9 = 9 pF 7 = 7 pF 6 = 6 pF	-1210B = ECX-1210B	Blank = ±20 ppm * C = ± 10 ppm	M = -20 ~ +70°C N = -40 ~ +85°C
.327 = 32.768 KHz				TR = Tape & Reel 5K/Reel

* Contact ECS for availability

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POCKET TAPE DIMENSIONS (mm)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
1.42	1.17	8.0	3.5	4.0	0.5	0.2	0.65	180	5000pcs

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

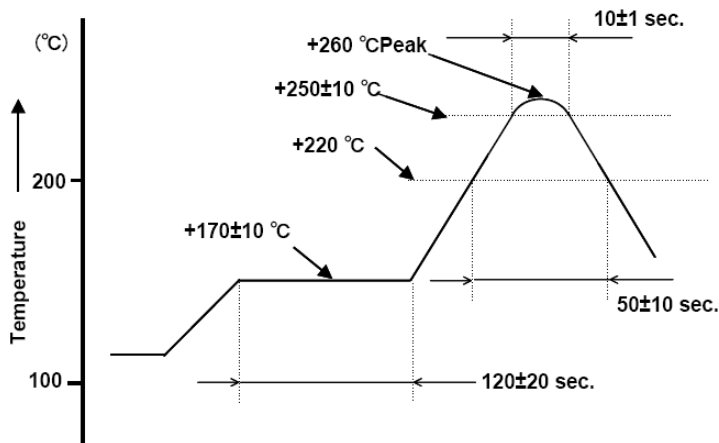


Figure 1) Suggested Reflow Profile