

The ECX-34Q is a very compact SMD Tuning Fork Crystal with a 3.2 x 1.5 mm footprint. AEC-Q200 Qualified.

# ECX-34Q SMD CRYSTAL

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- RoHS Compliant
- MSL: 1
- Lead Finish: Au
- AEC-Q200 Qualified
- TS16949 certified production
- PPAP supported

## OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-34Q			UNITS
		MIN	TYP	MAX	
Frequency	F <sub>0</sub>		32.768		KHz
Frequency Tolerance *	@ +25°C			± 20	ppm
Load Capacitance	Specify in P/N		12.5		pF
Drive Level	D <sub>L</sub>		0.1	0.5	μW
Equivalent Series Resistance	R <sub>1</sub>			70K	Ω
Turnover Temperature		+20	+25	+30	°C
Temperature Coefficient		-0.028	-0.034	-0.040	Ppm/°C <sup>2</sup>
Shunt Capacitance	C <sub>0</sub>		1.1		pF
Motional Capacitance	C <sub>1</sub>		3.5		fF
Aging (First Year)	@ +25°C ±3°C			±3	ppm
Operating Temperature *	S Option	-40		+125	°C
Storage Temperature		-55		+125	°C

## DIMENSIONS (mm)

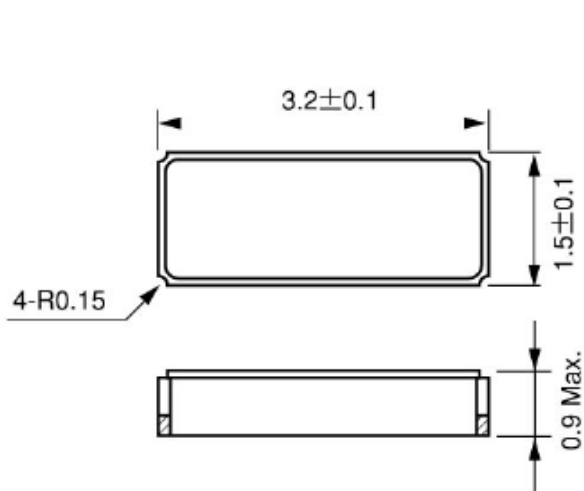


Figure 1) Top, Side, and Bottom views

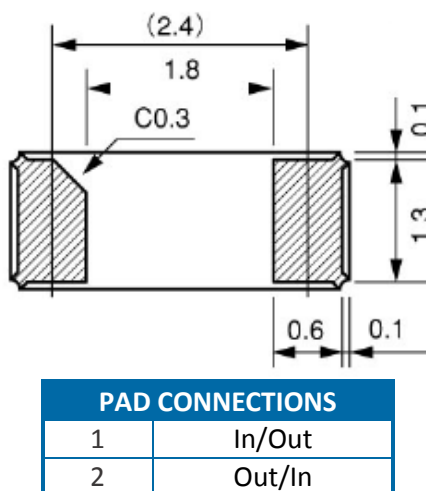


Figure 2) Suggested Land Pattern

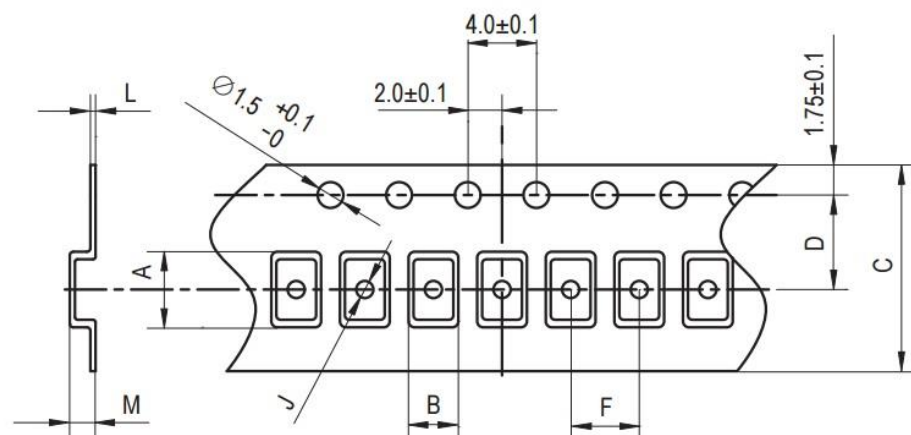
## PART NUMBERING GUIDE: Example ECS-.327-12.5-34QS-TR

ECS - FREQUENCY ABBREVIATION	LOAD CAPACITANCE	PACKAGE	CUSTOM OPTIONS		PACKAGING
			Tolerance	Operating Temp	
ECS	.327 = 32.768 KHz	-34Q = ECX-31B	Blank = ±20 ppm * C = ±10 ppm	N = -40 ~ +85°C S = -40 ~ +125°C	TR = Tape & Reel 3K/Reel

\*Contact ECS for availability

Rev.2017

## POCKET TAPE DIMENSIONS (mm)



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
3.4	1.7	12.0	5.5	4.0	1.0	0.3	1.2	180	3000pcs

### SOLDER PROFILE

Peak solder Temp +260°C Max 10 sec Max.

2 Cycles Max.

MSL 1, Lead Finish Au

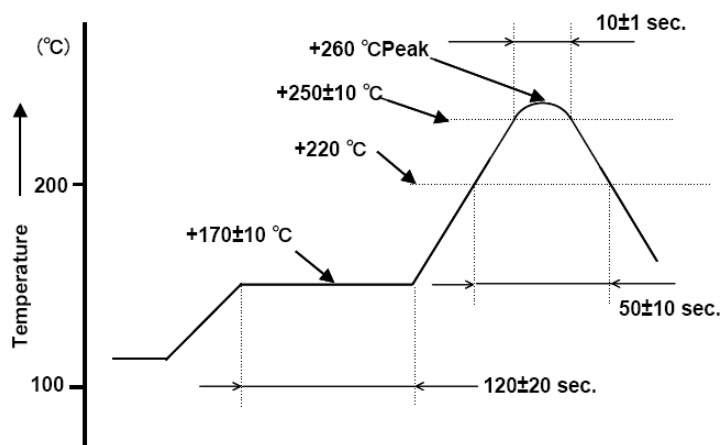


Figure 1) Suggested Reflow Profile