

# **ECX-34Q SMD CRYSTAL**





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3.2 x 1.5 mm footprint. AEC-Q200 Qualified.

The ECX-34Q is a very compact SMD Tuning Fork Crystal with a

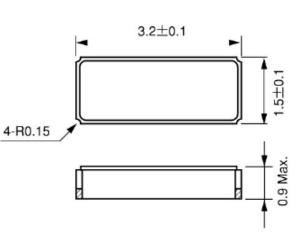


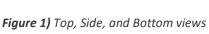
- RoHS Compliant
- MSL: 1
- Lead Finish: Au
- AEQ-Q200 Qualified
- TS16949 certified production
- PPAP supported

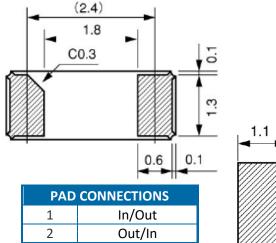
## **DIMENSIONS (mm)**

## **OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS**

PARAMETERS	CONDITIONS	ECX-34Q		UNITS	
		MIN	TYP	MAX	
Frequency	Fo		32.768		KHz
Frequency Tolerance *	@ +25°C			± 20	ppm
Load Capacitance	Specify in P/N		12.5		pF
Drive Level	$D_L$		0.1	0.5	μW
Equivalent Series Resistance	R1			70K	Ω
Turnover Temperature		+20	+25	+30	°C
Temperature Coefficient		-0.028	-0.034	-0.040	Ppm/°C <sup>2</sup>
Shunt Capacitance	Co		1.1		рF
Motional Capacitance	C1		3.5		fF
Aging (First Year)	@ +25°C ±3°C			±3	ppm
Operating Temperature *	S Option	-40		+125	°C
Storage Temperature		-55		+125	°C







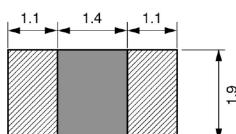


Figure 2) Suggested Land Pattern

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

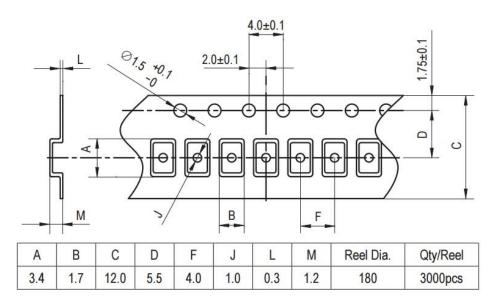
ECS - FREQUENCY ABBREVIATION LOAD		PACKAGE	CUSTOM OF	PACKAGING	
	CAPACITANCE		Tolerance	Operating Temp	
ECS .327 = 32.768 KHz	12.5 = 12.5 pF 9 = 9 pF 7 = 7 pF 6 = 6 pF	-34Q = ECX-31B	Blank = ±20 ppm * C = ±10 ppm	N = -40 ~ +85°C S = -40 ~ +125°C	TR = Tape & Reel 3K/Reel

\*Contact ECS for availability Rev.2017





### **POCKET TAPE DIMENSIONS (mm)**



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

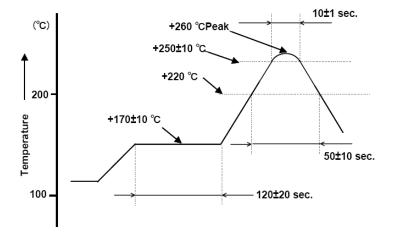


Figure 1) Suggested Reflow Profile