

- ▶ Low Profile
- ▶ Long term stability
- ▶ Industry standard footprint
- ▶ Extended Temp. Range
- ▶ RoHS Compliant

# ECX-306X

## SMD TUNING FORK CRYSTAL

The ECX-306X is a compact SMD Tuning Fork Crystal. The 3.8 x 8.0 x 2.5 mm package is ideal for today's SMD manufacturing environment.

### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-306X			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	DL			1.0	μW
Equivalent Series Resistance	R1			50K	Ω
Turnover Temperature		+20	+25	+30	°C
Temperature Coefficient		-0.028	-0.034	-0.040	ppm/°C <sup>2</sup>
Shunt Capacitance	Co		1.35		pF
First Year Aging	+25°C ±3°C			± 3	ppm
Operating Temperature	Topr	-40		+85	°C
Storage Temperature	Tstg	-55		+125	°C
Insulation Resistance	@ 100V DC	500M			Ω

### TOP, BOTTOM, SIDE VIEWS & LAND PATTERN

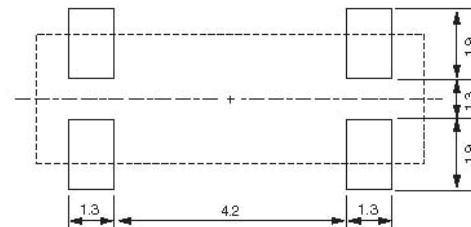
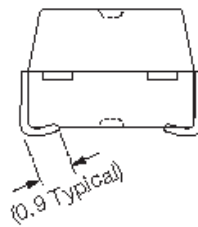
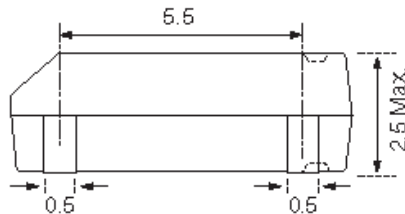
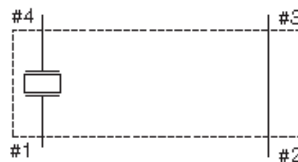
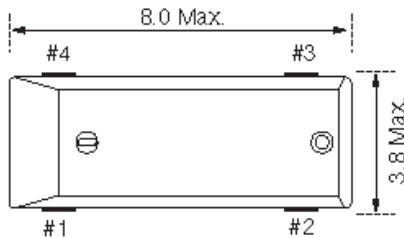


Figure 1) Top, Side and End Views  
Pad 2 & 3 No Connects

Figure 2) Bottom View and Suggested Land

### PART NUMBERING GUIDE: Example ECS-.327-12.5-17X-TR

ECS	- Frequency Abbreviation	- Load Capacitance	- Package Type	- Tolerance	- Packaging
	.327 = 32.768 KHz	12.5 = 12.5 pF 6 = 6 pF	-17X = ECX-306X	Blank (Std) = ±20 ppm C = ±10 ppm	-TR = Tape & Reel 3K/Reel