



- ▶ Low Profile
- ▶ 7 x 1.5 mm Footprint
- ▶ Extended Temp. Range
- ▶ RoHS Compliant

ECX-71

SMD TUNING FORK CRYSTAL

The miniature ECX-71 is a very compact SMD Tuning Fork Crystal. The 7 x 1.5 x 1.4 mm plastic package is ideal for today's SMD manufacturing environment.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-71			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		0.1	1.0	μW
Equivalent Series Resistance	R1			65K	Ω
Turnover Temperature		+20	+25	+30	°C
Temperature Coefficient		-0.025	-0.035	-0.045	ppm/°C ²
Shunt Capacitance	Co		0.8		pF
First Year Aging	+25°C ±3°C			± 3	ppm
Operating Temperature	T _{opr}	-40		+85	°C
Storage Temperature	T _{stg}	-55		+125	°C
Reflow Profile	IR Reflow (5 Sec Max)			+260	°C

TOP, BOTTOM, SIDE VIEWS & LAND PATTERN

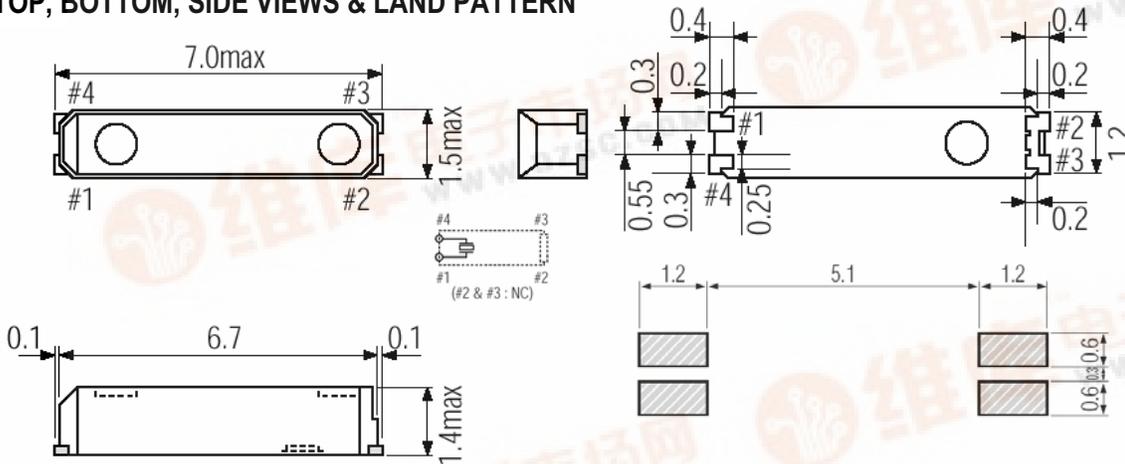


Figure 1) Top, Side and End View

Figure 2) Bottom View and Suggested Land

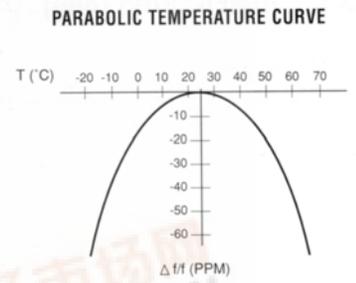


Figure 3) Parabolic Temp Curve

PART NUMBERING GUIDE: Example ECS-.327-12.5-38-TR

Frequency Abbreviation - Load Capacitance - Package Type - Packaging

.327 = 32.768 KHz

12.5 = 12.5 pF
7 = 7 pF

-38 = ECX-71

-TR = Tape & Reel
3K/Reel

