

- ▶ Extended Temp Range
- ▶ Compact and low profile
- ▶ Glass sealed ceramic package
- ▶ RoHS Compliant (Note 7 exemption)

ECX-64A-EN

SMD CRYSTAL

The ECX-64A-EN is a subminiature SMD Crystal with a 3.5 x 6 mm footprint. This cost effective all ceramic package has an operating temp of -40 to +85°C.

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECX-64A-EN			UNITS
		MIN	TYP	MAX	
Frequency	Fo	10.000		100.000	MHz
Frequency Tolerance	@ +25°C			± 30 *	ppm
Frequency Stability (ref @ 25°C)	-40 ~ +85°C			± 50 *	ppm
Shunt Capacitance				7.0	pF
Load Capacitance	Specify in P/N		20		pF
Operating Temperature	T _{opr}	-40		+85	°C
Storage Temperature	T _{stg}	-40		+105	°C
Drive Level				100	μW
Aging Characteristics (Per Year)	@ +25°C ± 3°C			± 5	ppm

EQUIVALENT SERIES RESISTANCE

FREQUENCY RANGE (MHz)	MODE	Max. ESR	FREQUENCY RANGE (MHz)	MODE	Max. ESR
10.000 ~ 15.999	Fundamental	80	20.000 ~ 49.999	Fundamental	40
16.000 ~ 19.999	Fundamental	60	50.000 ~ 100.000	3rd O/T	100

PACKAGE DIMENSIONS (mm)

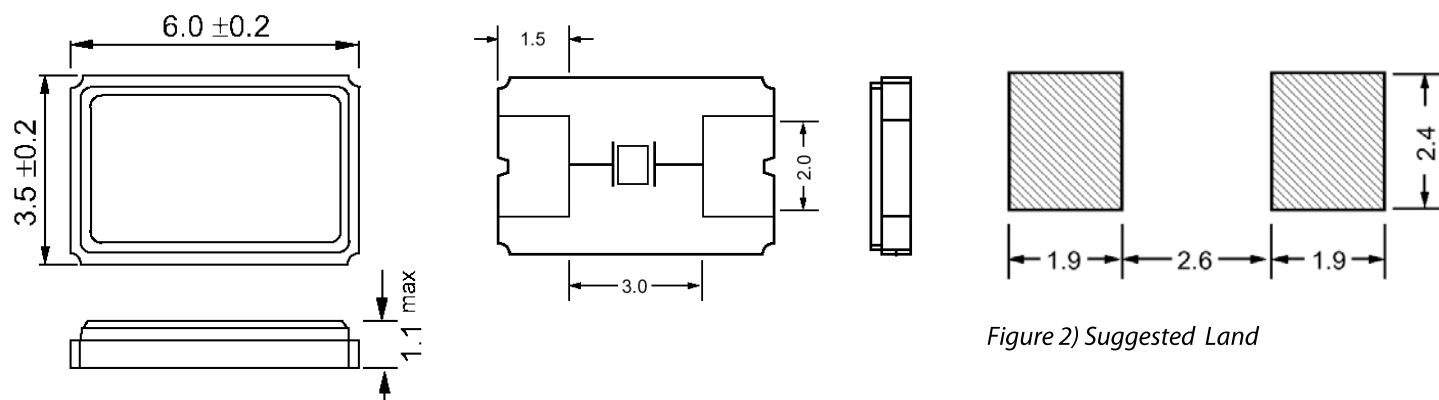


Figure 1) Top, Side, Bottom and End Views

Figure 2) Suggested Land

PART NUMBERING GUIDE: Example ECS-160-20-23A-EN-TR

ECS	- Frequency Abbreviation	- Load	- Package Type	- Tolerance	- Stability	- Temp Range	- Packaging
	160 = 16.000 MHz See P/N Guide for Std Frequencies	20 = 20.0 pF S = Series	-23A = ECX-64A	± 30 ppm	E = ± 50 ppm	N = -40 ~ +85°C	-TR = Tape & Reel 1K/Reel

* Tighter Tolerance/Stability Options Available (see custom options)
Not all stabilities are available at all temp ranges, consult ECS.