

### FEATURES

- \* Compact and low profile
- \* Seam-welded package
- \* Tape & Reel (1,000 pcs.)

The ISX-4 x 2.5 is our smallest sub-miniature SMD crystal with 4.0 x 2.5 mm footprint. This package is ideal for today's compact wireless applications where board space is critical.



### OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE		13.000		100.000	MHz
CALIBRATION TOLERANCE	@ +25°C			±50*	PPM
FREQUENCY STABILITY <sub>ref@25°C</sub>	-10 ~ +60 °C			±50*	PPM
SHUNT CAPACITANCE				5	pF
LOAD CAPACITANCE	C <sub>L</sub> (Customer Specified)	12	16 standard	Series	pF
DRIVE LEVEL	DL			100	µW
OPERATING TEMPERATURE	T <sub>OPR</sub> **	-20		+70	°C
STORAGE TEMPERATURE	T <sub>STG</sub>	-40		+85	°C
AGING CHARACTERISTICS (Per YEAR)	@ +25°C ± 3°C per year			± 5	PPM

\* Tighter specifications are available. \*\*Extended temperature range available.

### EQUIVALENT SERIES RESISTANCE / MODE OF OSCILLATION

FREQUENCY RANGE (MHz)	MODE	MAX ESR(Ω)	FREQUENCY RANGE (MHz)	MODE	MAX ESR(Ω)
13.000 ~ 16.000	Fundamental	60	35.000 ~ 40.000	3rd O/T	100
16.000 ~ 50.000	Fundamental	40	40.000 ~ 100.00	3rd O/T	60

### PACKAGE DIMENSIONS (mm)

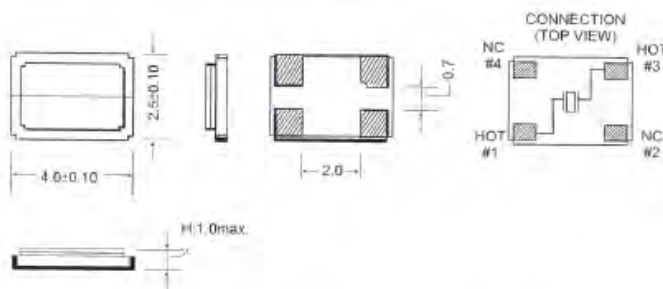


Figure 1) Top, Side, Bottom and End views

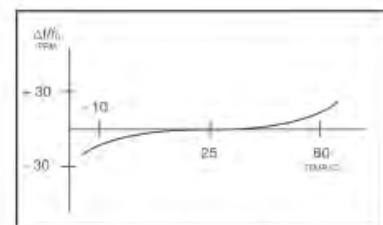


Figure 2) Frequency vs Temperature Curve