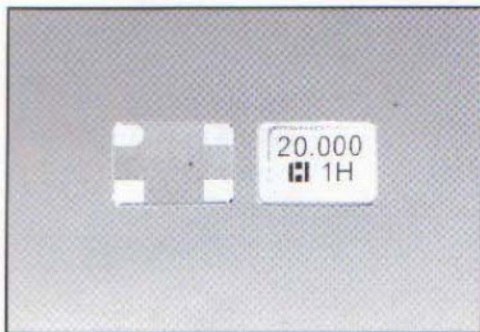




SURFACE MOUNT CRYSTAL

• HCX-3SB Series 3.2X2.5X0.65 mm



FEATURES

- Compact and thin (3.2X2.5X0.65 mm typ.)
- Frequency range of 13M to 54M with Fund
- Suitable application include telecommunications equipment, Short-range radio link modules, DVC, DSC PDA and PC.
- Excellent heat resistance and shock resistance.
- Products that are lead-free. These can meet the requirement of re-flow profiling using lead-free solder

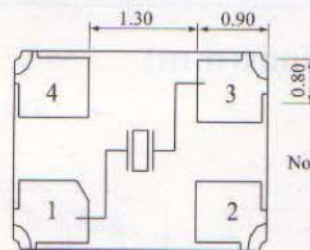
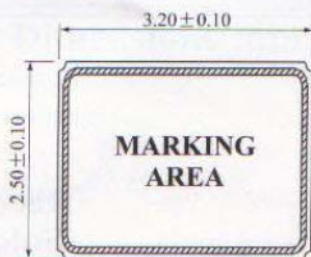
Electrical Specifications

Parameter	Symb	Condition	Min	Typ	Max	Units
Frequency Range	F ₀		10		54	MHz
Frequency Tolerance at 25°C	ΔF/ F ₀		±10	±15	±30	ppm
Temperature Stability	T _c	25°C	±10	±15	±30	ppm
Operating Temperature Range	T _{OPR}		-20		+70	°C
Storage Temperature Range	T _{STG}		-40		+85	°C
Shunt Capacitance	C ₀				3	pF
Load Capacitance	C _L		8		12	pF
Insulator Resistance	I _r	100V _{DC}	500			MΩ
Drive Level	D _L		10	100	300	μW
Aging(at 25°C)	F _a	AT 25°C, per year	-2.0		+2.0	ppm

Equivalent Series Resistance(ESR) and Mode of Vibration(Mode)

Frequency Range	Max ESR(Ω)	Mode
13.000MHz to 19.999MHz	80	Fundamental
20.000MHz to 25.999MHz	70	Fundamental
26.000MHz to 54.000MHz	50	Fundamental

Mechanical Dimensions(mm)



Note) Pin#2 and #4 are connected through cover, in case connected to GND, frequency might be drifted.

Recommended Solder Pattern

