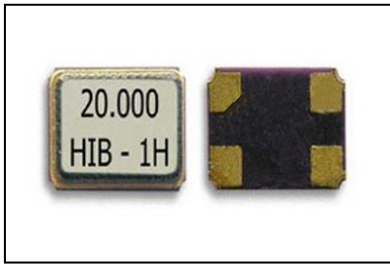


**HCX-7SB Series**

**6 to 160MHz**



The HCX-7SB is a miniature SMD crystal with 7X5 ceramic package and height of a 1.1mm max. The frequency of 6MHz to 160MHz make it widely applied in notebook computer, PCMCIA and communication equipment.

**FEATURES**

- Ultra-miniature size
- Fundamental till 40MHz
- Industry Standard
- Wide Frequency Range
- Ceramic Seam Weld
- Reflow soldering

**Electrical Specifications**

Parameter	Symbol	Condition	Min	Typ	Max	Units
Frequency Range	F <sub>0</sub>		6.000		160.000	MHz
Frequency Tolerance	ΔF/F <sub>0</sub>	at 25°C	±10	±30	±30	PPM
Temperature Stability	T <sub>C</sub>	Ref to 25°C	±20	±30	±30	PPM
Operating Temperature Range	T <sub>OPR</sub>		-55	-20 to +70	+125	°C
Storage Temperature Range	T <sub>STG</sub>		-40		+85	°C
Shunt Capacitance	C <sub>0</sub>				5	pF
Load Capacitance	C <sub>L</sub>	Customer Specified	10	20	Series	pF
Insulator Resistance	I <sub>R</sub>	100 V <sub>DC</sub>	500			MΩ
Drive Level	D <sub>L</sub>		1	100	200	μW
Aging	F <sub>a</sub>	at 25°C, per year	-3.0		+3.0	PPM
Packing Unit	1000 pcs/reel					

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

Frequency Range (MHz)	Max ESR (Ω)	Mode
6.000 to 9.999MHz	100	Fundamental
10.000 to 11.999MHz	60	Fundamental
12.000 to 29.999MHz	50	Fundamental
30.000 to 79.999MHz	90	3 <sup>rd</sup> Overtone
80.000 to 99.999MHz	90	3 <sup>rd</sup> Overtone
100.000 to 160.000MHz	100	3 <sup>rd</sup> Overtone

**Mechanical Dimensions – mm (inch)**

