Thru-Hole Crystal

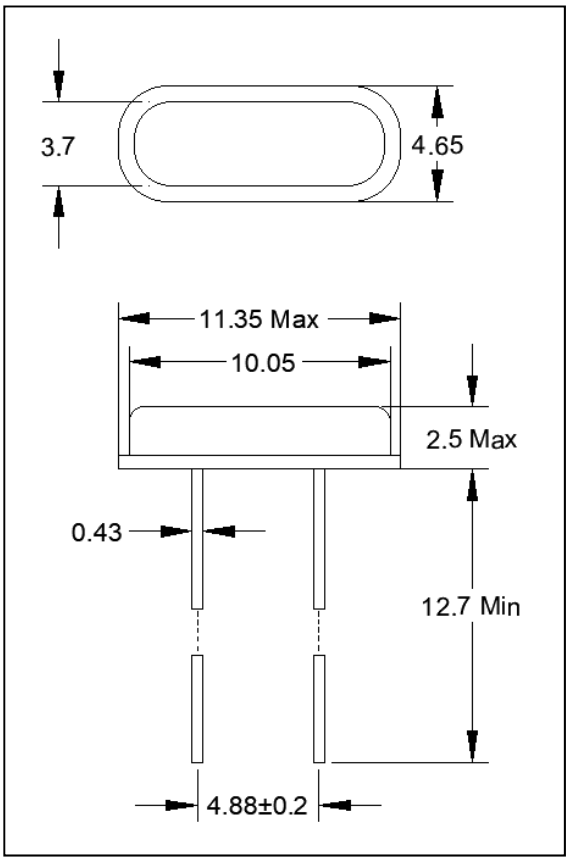
C9ST
(former HC49SSLF)
DATASHEET

- Tolerances down to ±10 PPM
- Stabilities down to ±5 PPM
- Operating Temperature Range to -55ºC ~ +125ºC

• C4ST STANDARD SPECIFICATIONS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range	3.200 ~ 80.000 MHz
Frequency Tolerance @ 25ºC	(See options on page 2)
Frequency Stability, ref @ 25ºC	(See options below)
Temperature Range Operating (TOPR) Storage (TSTG)	 (See options below) -40ºC ~ +125ºC
Shunt Capacitance (Co)	7pF
Load Capacitance (CL)	(See options on page 2)
Drive Level	0.5 mW (0.1 mW Typical)
Aging per year	±3 PPM
Maximum Soldering Temp / Time	260ºC / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish	Sn/Ag3.0/Cu0.5
Seal Method	Resistance Weld
Lead (Pb) Free	Yes
RoHS/REACH Compliant	Yes

Frequency Range (MHz)	Operating Mode	Max ESR Ω
4.000 ~ 5.000	Fundamental	150
5.000001 ~ 6.000	Fundamental	120
6.000001 ~ 7.000	Fundamental	100
7.000001 ~ 9.000	Fundamental	80
9.000001 ~ 13.000	Fundamental	60
13.000001 ~ 20.000	Fundamental	40
20.000001 ~ 40.000	Fundamental	30
24.000 ~ 70.000	3rd OT	100
70.000001 ~ 80.000	3rd OT	70



Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary. All specifications subject to change without notice. All dimensions are in mm.

•Available Operating Temperatures and Stabilities*

Operating Temperature	±5 PPM	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM	±100 PPM
-10°C to +60°C	O	O	O	O	O	O	O	O
-20°C to +70°C	Δ	O	O	O	O	O	O	O
-40°C to +85°C	X	X	O	O	O	O	O	O
-40°C to +105°C	X	X	X	X	X	Δ	O	O
-40°C to +125°C	X	X	X	X	X	X	Δ	O
-55°C to +125°C	X	X	X	X	X	X	Δ	O

Key: O=Available, X=Not Available, Δ=Consult Fox Technical Support
*Does not imply a stocked part.

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Title / Description: C9ST STANDARD SPECIFICATIONS		
Drawing Number: C9ST-DOC-1		**Size:** A
Part Number:		**Cage:** 61429
Draftsperson: BEC	**Approved:** MAJ	**Revision Date:** 06/10/2019

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Available Options & Part Identification for Thru-Hole Crystal C9ST[1]

F C9ST C B M F 16.0

F	C9ST	C	B	M	F	16.0
FOX	**Model Number**	**Tolerance** B = ±50ppm **C = ±30ppm** D = ±25ppm E = ±20ppm F = ±15ppm H = ±10ppm	**Stability** A = ±100ppm **B = ±50ppm** C = ±30ppm D = ±25ppm E = ±20ppm F = ±15ppm H = ±10ppm L = ±5ppm	**Load Capacitance[2]** A = Series E = 10pF G = 12pF K = 16pF L = 18pF **M = 20pF**	**Operating Temperature** D=-10 to +60ºC **F=-20 to +70ºC** M=-40 to +85ºC P=-40 to +105ºC I=-40 to +125ºC T=-55 to +125ºC	**Frequency (MHz)**

[1] Not all frequency, tolerance, stability, load, and operating temperature combinations may be available.
[2] Listed load capacitances represent the most commonly used. Other load capacitances are available. Contact Fox Technical Support for assistance

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