Resistance Weld SMD Crystal C4SD

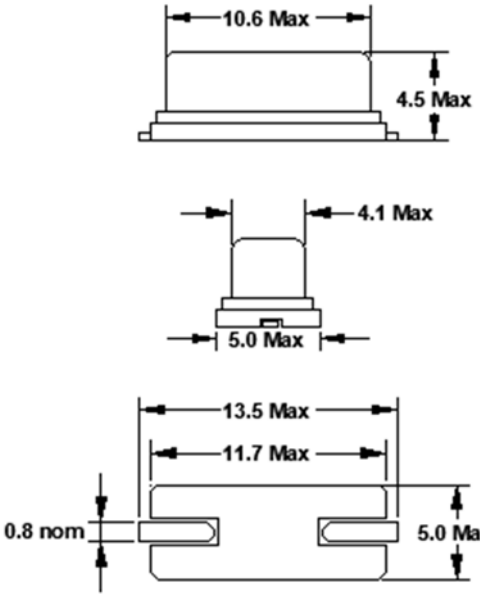
(former HC49SDLF)

DATASHEET

- Tolerances down to ±10ppm
- Stabilities down to ±5ppm
- Temperature Ranges as wide as -55ºC to +125ºC

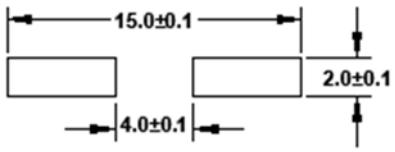
• SPECIFICATIONS

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) -55ºC ~ +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 x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish:	Sn/Ag3/Cu0.5
Seal Method	Resistance Weld
Lead (Pb) Free	Yes
RoHS Compliant	Yes - No Exemptions



Frequency Range (MHz)	Operating Mode	Max ESR Ω
3.200 ~ 3.500	Fundamental	300
>3.500 ~ 4.000	Fundamental	200
>4.000 ~ 5.000	Fundamental	150
>5.000 ~ 6.000	Fundamental	120
>6.000 ~ 7.000	Fundamental	100
>7.000 ~ 9.000	Fundamental	80
>9.000 ~ 13.000	Fundamental	60
>13.000 ~ 20.000	Fundamental	40
>20.000 ~ 40.000	Fundamental	30
24.000 ~ 70.000	3rd OT	100
>70.000 ~ 80.000	3rd OT	70

Recommended Solder Pad Layout



Dimensions are in millimeters.

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.

•Available Operating Temperatures and Stabilities*

Stability Temperature	±5 PPM	±10 PPM	±15 PPM	±20 PPM	±25 PPM	±30 PPM	±50 PPM	±100 PPM
-10 to +60ºC	O	O	O	O	O	O	O	O
-20 to +70ºC	Δ	O	O	O	O	O	O	O
-40 to +85ºC	X	X	O	O	O	O	O	O
-40 to +105ºC	X	X	X	X	X	Δ	O	O
-40 to +125ºC	X	X	X	X	X	X	Δ	O
-55 to +125ºC	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: C4SD SERIES STANDARD SPECIFICATIONS		
Drawing Number: C4SD-DOC-1		**Size:** A
Part Number:		**Cage:** 61429
Draftsperson: MAJ	**Approved:** BEC	**Revision Date:** 06/10/2019

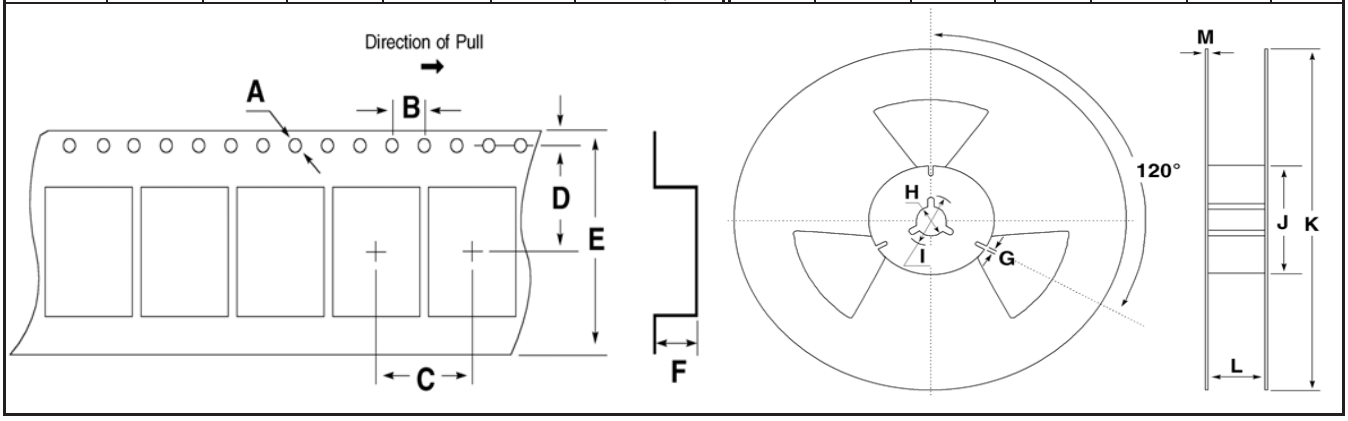
Resistance Weld SMD Crystal C4SD

(former HC49SDLF)

DATASHEET

• TAPE SPECIFICATIONS (millimeters)						
A	B	C	D	E	F	Reel Qty
∅1.55	4.0	12.0	11.5	24.0	4.8	-T1 =1,000

• REEL SPECIFICATIONS (millimeters)						
G	H	I	J	K	L	M
2.0	∅13	∅21	∅80	∅330	25.5	2.0



Available Options & Part Identification for Crystal Model C4SD[1]

F C4SD C B M F 25.0

F	C4SD	C	B	M	F	25.0
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 J = 15pF 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.
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