



FEATURES

- Fundamental to 40 MHz
- Tape and Reel (1,000 pcs. STD)

OPTIONS

- 3.2mm Height Max (C9SD)

• SPECIFICATIONS	
PARAMETERS	MAX (unless otherwise noted)
Frequency Range	3.200 ~ 80.000 MHz
Frequency Tolerance @ 25°C	±10 ~ 50 PPM ¹ (see options on page 2)
Frequency Stability, ref @ 25°C	±5 ~ 100 PPM (see options below)
Temperature Range	
Operating (TOPR)	-55°C ~ +125°C (see options below)
Storage (TSTG)	-55°C ~ +125°C
Shunt Capacitance (Co)	7pF
Load Capacitance (CL)	10 pF ~ Series (see options on page 2)
Drive Level	0.5 mW (0.1 mW Typical)
Aging per year	±3 PPM
Maximum Soldering Temp / Time	260°C / 10 Seconds
Moisture Sensitivity Level (MSL)	1
Termination Finish:	Sn/Ag/Cu
Seal Method	Resistance Weld
Lead (Pb) Free	Yes
RoHS Compliant	No Exemptions

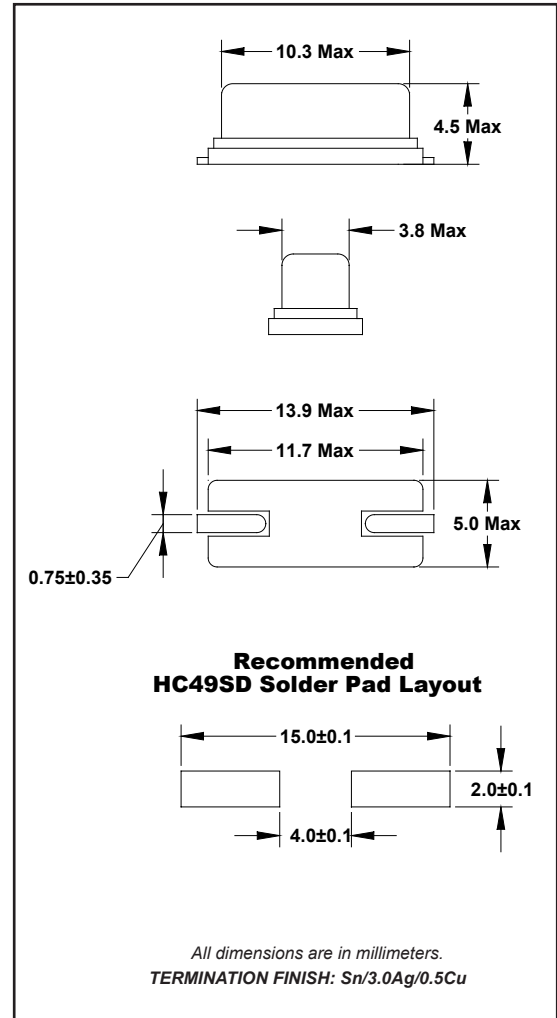
¹ Crystal has a ±30ppm tolerance specification for all standard part numbers.
 Note: Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations, etc. may vary.
 All specifications subject to change without notice.

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
27.000 ~ 70.000	3rd OT	100
70.000+ ~ 80.000	3rd OT	80

•Other Stabilities Available

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

Key: O=Available, X=Not Available, Δ=Consult Fox Technical Support





Resistance Weld SMD Crystal

C4SD
(former HC49SDF)
DATASHEET

• TAPE SPECIFICATIONS (millimeters)								• REEL SPECIFICATIONS (millimeters)							
MODEL	A	B	C	D	E	F	STD Reel QTY	MODEL	G	H	I	J	K	L	M
C4SD	∅1.5	4.0	12.0	11.5	24.0	4.8	1,000	C4SD	2.0	∅13	∅21	∅80	∅330	25.5	2.0

**Available Options & Part Identification for
Crystal Model Number C4SD**

F C4SD C B M M 3.6864

F	C4SD	C	B	M	M	3.6864
FOX	Model Number	Tolerance B=50ppm C=30ppm E=20ppm F=15ppm H=10ppm L= 5ppm	Stability A=100PPM B=50ppm C=30ppm E=20ppm F=15ppm H=10ppm L= 5ppm	Load Capacitance A=Series E=10pF G=12pF J=15pF K=16pF L=18pF M=20pF N=22pF Q=30pF R=32pF	Operating Temperature D=-10~+ 60°C F=-20~+70°C M=-40~+85°C P=-40~+105°C I=-40~+125°C T=-55~+125°C	Frequency



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