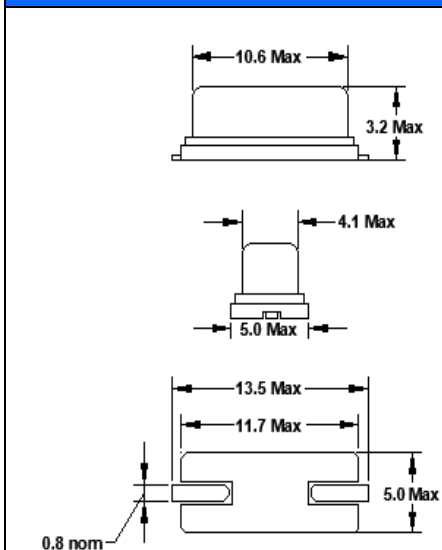
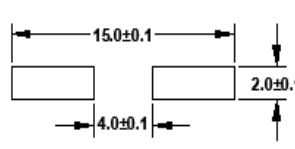


### Features

- Tolerances down to  $\pm 10$ PPM
- Stabilities down to  $\pm 5$ PPM
- Temperature Ranges as wide to  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	4.000 ~ 80.000 MHz
Frequency Tolerance @ 25°C	(See options below)
Frequency Stability, ref 25°C	(See options below)
Temperature Range	
Operating ( $T_{OPR}$ )	(See options below)
Storage ( $T_{STG}$ )	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Shunt Capacitance ( $C_0$ )	7 pF
Load Capacitance ( $C_L$ )	(See options below)
Drive Level	0.5 mW (0.1 mW typical)
Aging per year (@ 25°C)	$\pm 3$ PPM
Moisture Sensitivity Level (MSL)	260°C / 10 Seconds x 2
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 $\Omega$
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

DIMENSIONS / MECHANICAL SPECIFICATIONS

<p><b>Recommended Solder Pad Layout</b></p>  <p><b>Dimensions in mm</b></p>
<p>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.</p>

AVAILABLE OPERATING TEMPERATURES AND STABILITIES*								
Operating Temperature	$\pm 5$ PPM	$\pm 10$ PPM	$\pm 15$ PPM	$\pm 20$ PPM	$\pm 25$ PPM	$\pm 30$ PPM	$\pm 50$ PPM	$\pm 100$ PPM
$-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$	O	O	O	O	O	O	O	O
$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$	$\Delta$	O	O	O	O	O	O	O
$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$	X	X	O	O	O	O	O	O
$-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$	X	X	X	X	X	$\Delta$	O	O
$-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$	X	X	X	X	X	X	$\Delta$	O
$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$	X	X	X	X	X	X	$\Delta$	O

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

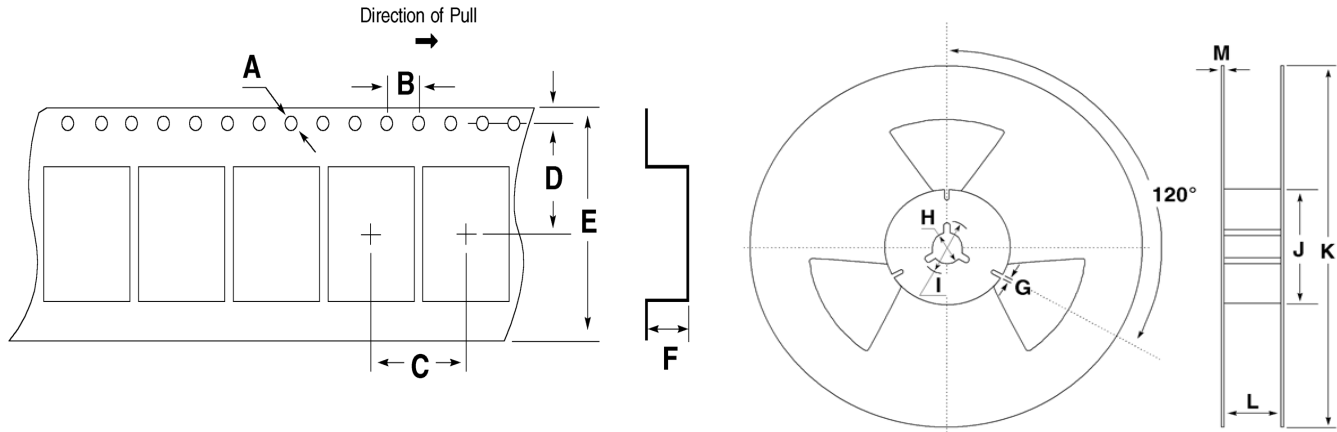
# FC9SD

(Former HC49SSDLF)

13.5mm X 5.0mm  
Resistance Weld SMD Crystal



TAPE SPECIFICATIONS (mm)						REEL SPECIFICATIONS (mm)							
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.55	4.0	12.0	11.5	24.0	3.5	T1 = 1,000	2.0	ø13	ø21	ø80	ø330	25.5	2.0



## Available Options & Part Identification for Resistance Weld SMD Crystal FC9SD<sup>1</sup>

Sample PN: FC9SDCBMF25.0-T1

F	C9SD	C	B	M	F	25.0	-T1
<u>Fox</u>	<u>Model Number</u>	<u>Tolerance</u>	<u>Stability</u>	<u>Load Capacitance<sup>2</sup></u>	<u>Operating Temperature</u>	<u>Frequency (MHz)</u>	<u>Values Added Options</u>
		B = ±50 PPM <b>C = ±30 PPM</b> D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	A = ±100 PPM <b>B = ±50 PPM</b> C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM L = ±5 PPM	A = Series E = 10pF G = 12pF J = 15pF K = 16pF L = 18pF <b>M = 20pF</b> Q = 30pF	D = -10 to +60°C <b>F = -20 to +70°C</b> M = -40 to +85°C P = -40 to +105°C I = -40 to +125°C T = -55 to +125°C		Blank = Bulk <b>T1 = 1,000 pcs</b>

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 us for assistance

### Reliability Test Conditions

Please contact Abracon Quality Assurance department