

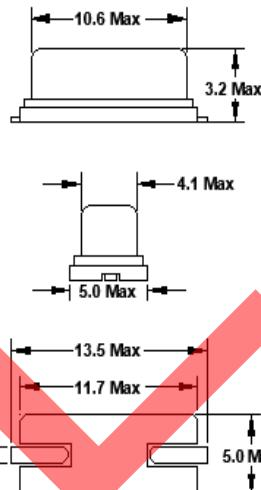
Features

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

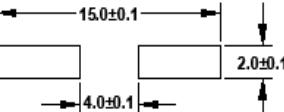
STANDARD SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	4.000 ~ 80.000 MHz
Frequency Tolerance @ 25°C	(See options below)
Frequency Stability, ref 25°C	(See options below)
Temperature Range Operating (T_{OPR})	(See options below)
Storage (T_{STG})	$-55^\circ\text{C} \sim +125^\circ\text{C}$
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)	$\pm 3\text{ PPM}$
Moisture Sensitivity Level (MSL)	260°C / 10 Seconds ms 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 Ω
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



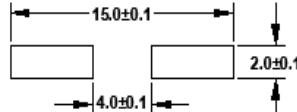
0.8 nom



Dimensions in mm

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.

Recommended Solder Pad Layout



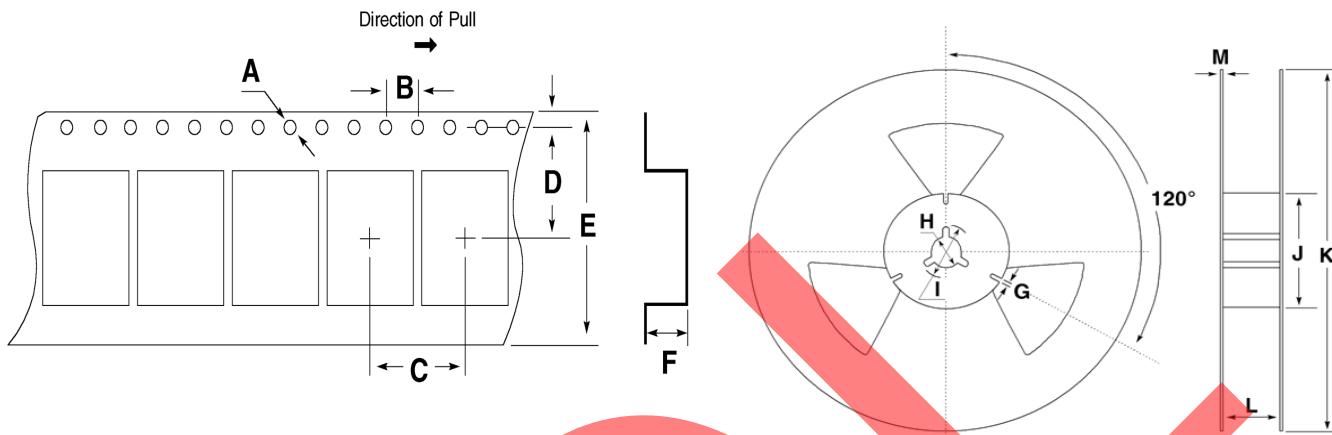
Dimensions in mm

AVAILABLE OPERATING TEMPERATURES AND STABILITIES*

Operating Temperature	$\pm 5\text{ PPM}$	$\pm 10\text{ PPM}$	$\pm 15\text{ PPM}$	$\pm 20\text{ PPM}$	$\pm 25\text{ PPM}$	$\pm 30\text{ PPM}$	$\pm 50\text{ PPM}$	$\pm 100\text{ PPM}$
-10°C ~+60°C	O	O	O	O	O	O	O	O
-20°C ~+70°C	Δ	O	O	O	O	O	O	O
-40°C ~+85°C	X	X	O	O	O	O	O	O
-40°C ~+105°C	X	X	X	X	X	Δ	O	O
-40°C ~+125°C	X	X	X	X	X	X	Δ	O
-55°C ~+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.

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 FC9SD¹
Sample PN: FC9SDCBMF25.0-T1

F	C9SD	C	B	M	F	25.0	-T1
<u>Fox</u>	<u>Model Number</u>	<u>Tolerance</u> B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM	<u>Stability</u> A = ±100 PPM B = ±50 PPM C = ±30 PPM D = ±25 PPM E = ±20 PPM F = ±15 PPM H = ±10 PPM L = ±5 PPM	<u>Load Capacitance²</u> A = Series B = 10pF C = 12pF D = 15pF E = 16pF F = 18pF G = 20pF H = 30pF	<u>Operating Temperature</u> D = -10 to +60°C F = -20 to +70°C M = -40 to +85°C P = -40 to +105°C I = -40 to +125°C T = -55 to +125°C	<u>Frequency (MHz)</u>	<u>Values Added Options</u> Blank = Bulk T1 = 1,000 pcs

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 Abracan Quality Assurance department