

### Features

- EMI Reduction
- Temperature Ranges to -40°C to +85°C
- Supply Voltage: 3.3V

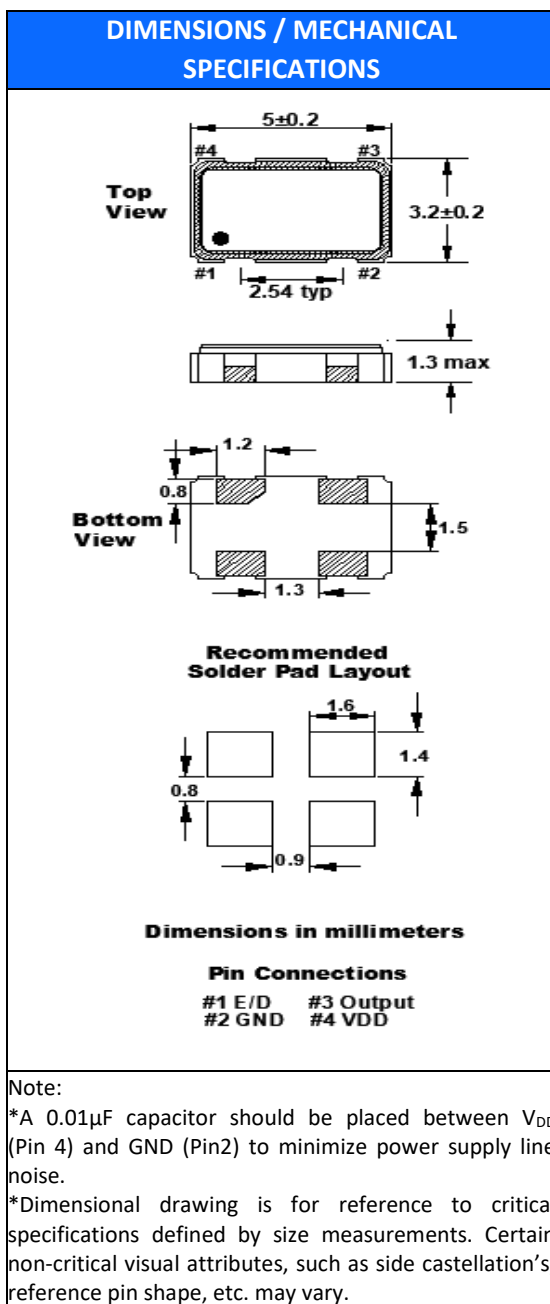
ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range (Fo)	1 ~ 200MHz
Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range (T <sub>STG</sub> )	-55 ~ +125°C
Supply Voltage (V <sub>DD</sub> )	3.3V±10%
Frequency Stability <sup>2</sup>	±50PPM (Standard)
Input Current (I <sub>DD</sub> )	
1 ~ <50MHz	20 mA
50 ~ <80MHz	25 mA
80 ~ <100MHz	30 mA
100 ~ 200MHz	40 mA
Output Symmetry (50% V <sub>DD</sub> level)	40% ~ 60%
Rise/Fall Time (10%/90% V <sub>DD</sub> Levels) (T <sub>R</sub> /T <sub>F</sub> )	
13 ~ <50MHz	10 nS
50 ~ <80MHz	8 nS
80 ~ <100MHz	5 nS
100 ~ 160MHz	4 nS
>160 ~ 200MHz	3 nS
Output Voltage (V <sub>OL</sub> )	10% V <sub>DD</sub>
(V <sub>OH</sub> )	90% V <sub>DD</sub> Min
Spread Spectrum Function	
Center Spread	±0.125% ~ ±2%
Down Spread	-0.5% ~ 4%
Modulation Frequency	30 ~ 40kHz
Output Load (HCMOS)	15 pF
Start-up Time (T <sub>S</sub> )	10 mS
Output Disable Time <sup>1</sup>	100 mS
Output Enable Time <sup>1</sup>	2 mS

ENABLE / DISABLE FUNCTION	
Pin <sup>1</sup>	Output (pin 3)
OPEN <sup>1</sup>	Active
'1' Level V <sub>IH</sub> ≥ 70%V <sub>DD</sub>	Active
'0' Level V <sub>IL</sub> ≤ 30%V <sub>DD</sub>	High Z

Available Options by Stability & Operating Temp		
Frequency Stability <sup>2</sup>	Operating Temperature (°C)	Frequency Range (MHz)
±50PPM	-40 ~ +85	1 ~ 200.000
±25PPM	0 ~ +70	1 ~ 200.000
±25PPM	-40 ~ +85	1 ~ 200.000

<sup>1</sup> An internal pull-up resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

<sup>2</sup> Inclusive of 25°C tolerance, operating temperature range.



<b>STANDARD SPECIFICATIONS</b>	
PARAMETERS	MAX (Unless otherwise noted)
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au (0.3~1μm) over Ni (1.27~8.89μm)
Seal Method	Seam
Lead (Pb) Free	Yes
ROHS/REACH Compliant	Yes

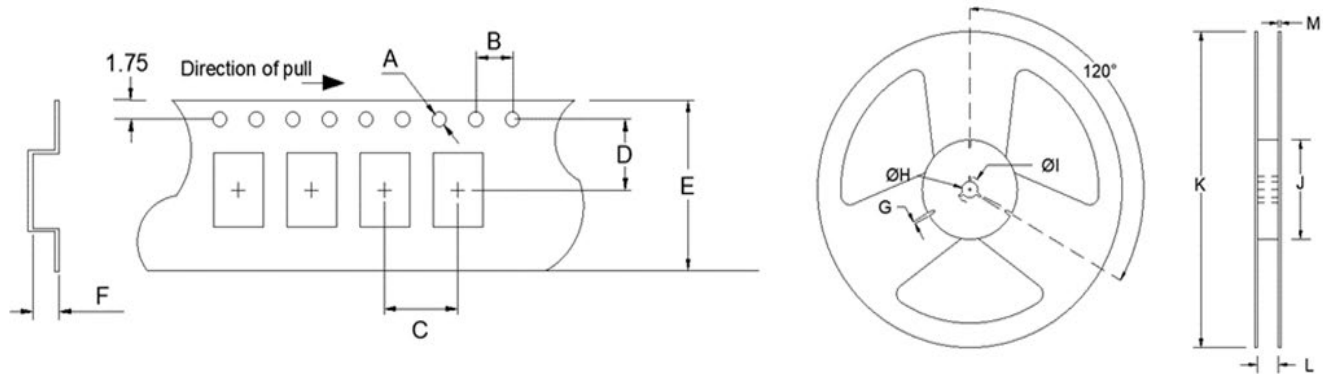
# FS5BC

(Former FSS53B Series)

5mm x 3.2mm  
**Spread Spectrum SMD Oscillator**



TAPE SPECIFICATIONS (mm)						REEL SPECIFICATIONS (mm)							
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.5	4.0	8.0	5.5	12.0	1.5	-T1 = 1,000	2.0	ø13	ø21	ø62	ø180	13.5	2.0



## Available Options & Part Identification for Spread Spectrum SMD Oscillator S5BC\*

Sample PN: **FS5BCBM25.0-T1**

F	S5B	C	B	M	25.0	-T1	
<b>Fox</b>	<b>Model Number</b>	<b>Voltage</b> C = 3.3V±5%	<b>Stability</b> N = ±0.125% A = ±0.25% <b>B = ±0.5%</b> C = ±0.75% D = ±1% E = ±1.5% F = ±2%	<b>Down Spread</b> P = -0.25% G = -0.5% H = -1% J = -1.5% K = -2% L = -3% M = -4%	<b>Operating Temperature</b> C = 0 to +70°C <b>M = -40 to +85°C</b>	<b>Frequency (MHz)</b>	<b>Values Added Options</b> Blank = Bulk T1 = 1,000 pcs

\* Not all frequencies in the frequency range available.

### Reliability Test Conditions

Please contact Abracon Quality Assurance department