

Features

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

ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range (F ₀)	1 ~ 200MHz
Operating Temperature Range	-40°C ~ +85°C
Storage Temperature Range (T _{STG})	-55°C ~ +125°C
Supply Voltage (V _{DD})	3.3V±10%
Frequency Stability ²	±50PPM (Standard)
Input Current (I _{DD})	
1 ~ <50MHz	20 mA
50 ~ <80MHz	25 mA
80 ~ <100MHz	30 mA
100 ~ 200MHz	40 mA
Standby Input Current	10µA
Output Symmetry (50% V _{DD} level)	40% ~ 60%
Rise/Fall Time (10%/90% V _{DD} Levels) (T _R /T _F)	
13 ~ <50MHz	10nS
50 ~ <80MHz	8nS
80 ~ <100MHz	5nS
100 ~ 160MHz	4nS
>160 ~ 200MHz	3nS
Output Voltage (V _{OL})	10 % V _{DD}
(V _{OH})	90 % V _{DD} 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 _S)	10 mS
Output Disable Time ¹	100 nS
Output Enable Time ¹	10 mS

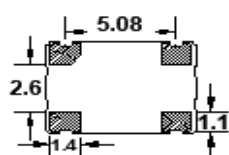
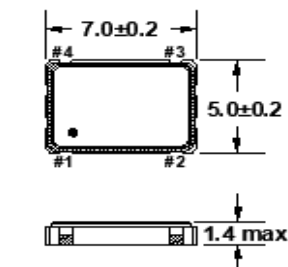
ENABLE / DISABLE FUNCTION	
Pin1	Output (pin 3)
OPEN ¹	Active
'1' Level V _{IH} ≥ 70%V _{DD}	Active
'0' Level V _{IL} ≤ 30%V _{DD}	High Z

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

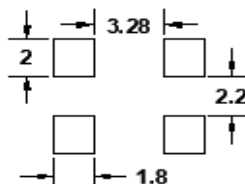
¹ An internal pull-up resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

² Inclusive of 25°C tolerance, operating temperature range.

DIMENSIONS / MECHANICAL SPECIFICATIONS



Recommended Solder Pad Layout



Dimensions in mm

Pin Connections

#1 E/D #3 Output
#2 GND #4 V_{DD}

Note:

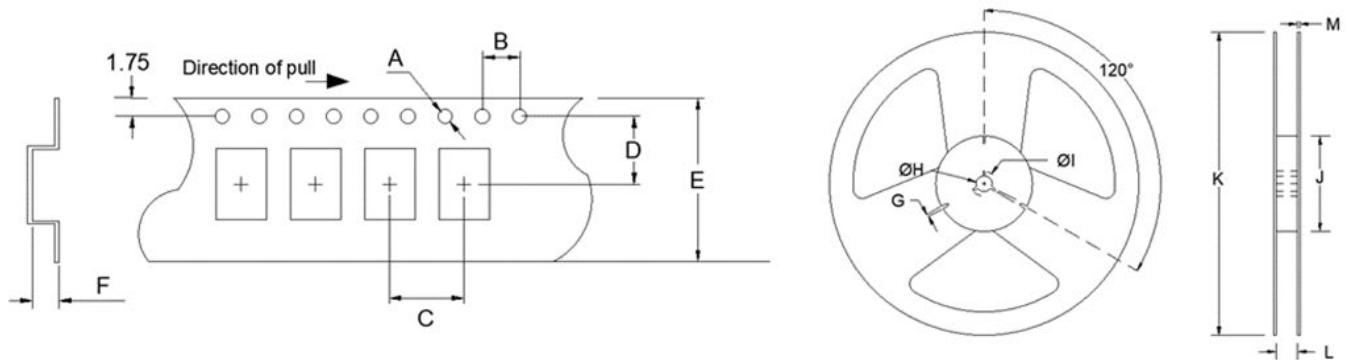
1, A 0.01μF capacitor should be placed between V_{DD} (Pin 4) and G_{ND} (Pin2) to minimize power supply line noise.

2, Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellation's, etc. may vary.

STANDARD SPECIFICATIONS

PARAMETERS	MAX (Unless otherwise noted)
Maximum Soldering Temp / Time	260°C / 10 Seconds x 2
Moisture Sensitivity Level (MSL)	1
Termination Finish	Au over Ni
Seal Method	Seam
Lead (Pb) Free	Yes
ROHS/REACH Compliant	Yes

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	7.5	16.0	2.15	-T1 = 1,000 -T2 = 2,000	2.0	ø13	ø21	ø80	ø255	17.5	2.0



Available Options & Part Identification*

Sample PN: **FS7SCBM25.0-T2**

F	S7S	C	B		M	25.0	-T2
Fox	Model Number	Voltage C = 3.3V±10%	Center Spread N = ±0.125% A = ±0.25% B = ±0.5% C = ±0.75% D = ±1% E = ±1.5% F = ±2%	Down Spread P = -0.25% G = -0.5% H = -1% J = -1.5% K = -2% L = -3% M = -4%	Operating Temperature C = 0 to +70°C M = -40 to +85°C	Frequency (MHz)	Values Added Options Blank = Bulk T1 = 1,000 pcs T2 = 2,000 pcs

*Not all frequencies in the frequency range available.

Reliability Test Conditions

Please contact Abracon Quality Assurance department