HCMOS 7x5mm SMD Oscillator

O7HH
(former F3345 Series)
DATASHEET

- HCMOS Output
- Stabilities to ±20 PPM
- Temperature Ranges to -40ºC to +85ºC
- Supply Voltage: 5.0V

ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (F_O)	1 ~ 125MHz
Storage Temperature Range (T_{STG})	-55 ~ +125ºC
Supply Voltage (V_{DD})	5.0V ±10%
Input Current (I_{DD})	
1.000 ~ 25.000MHz	25 mA
25.000+ ~ 50.000MHz	40 mA
50.000+ ~ 67.000MHz	60 mA
67.000+ ~ 80.000MHz	73 mA
80.000+ ~ 125.000MHz	90 mA
Output Symmetry (50% V_{DD}) 1 ~ 80MHz	45/55%
80+ ~ 125MHz	40/60%
Rise/Fall Time (10%/90% V_{DD} Levels) (T_R/T_F)	
1 ~ 80.000MHz	7nS
80+ ~ 100MHz	5nS
100+ ~ 125MHz	4nS
Output Voltage (V_{OL})	10% V_{DD}
(V_{OH})	90% V_{DD} Min
Output Current (I_{OL})	16mA Min
(I_{OH})	-16mA Min
Output Load (HCMOS)	50pF
Start-up Time (T_S)	10 mS
Output Disable Time [1]	100 nS
Output Enable Time [1]	100 nS

ENABLE / DISABLE FUNCTION	
Pin1	Output (pin 3)
OPEN [1]	Active
'1' Level $V_{IH} \geq 70\%V_{DD}$	Active
'0' Level $V_{IL} \leq 30\%V_{DD}$	High Z

• Available Options by Stability & Operating Temperature

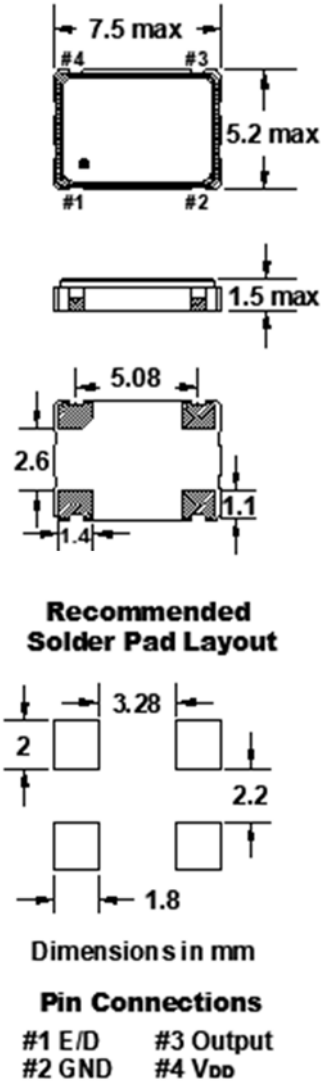
Frequency Stability	Operating Temperature (ºC)	Frequency Range (MHz)
±100PPM[2]	-10 ~ +70	1.000 ~ 125.000
±100PPM[2]	-40 ~ +85	1.000 ~ 125.000
±50PPM[2]	-10 ~ +70	1.000 ~ 125.000
±50PPM[2]	-40 ~ +85	1.000 ~ 125.000
±25PPM[2]	-10 ~ +70	1.000 ~ 125.000
±25PPM[3]	-40 ~ +85	1.000 ~ 80.000
±20PPM[3]	-10 ~ +70	1.000 ~ 80.000

[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, input voltage change, load change, reflow, one-year aging, shock, and vibration.
[3] Inclusive of 25°C tolerance, operating temperature range.

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Title / Description: O7HH SERIES STANDARD SPECIFICATIONS		
Drawing Number: O7HH-DOC-1		**Size:** A
Part Number:		**Cage:** 61429
Draftsperson: BEC	**Approved:** MAJ	**Revision Date:** 10/3/2019

DIMENSIONS / MECHANICAL SPECIFICATIONS



Recommended Solder Pad Layout

Dimensions in mm

Pin Connections

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

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

Notes:
A 0.01µF capacitor should be placed between V_{DD} (Pin 4) and GND (Pin2) to minimize power supply line noise.
Dimensional drawing is for reference to critical specifications defined by size measurements.
Certain non-critical visual attributes, such as side castellations, reference pin shape, etc. may vary

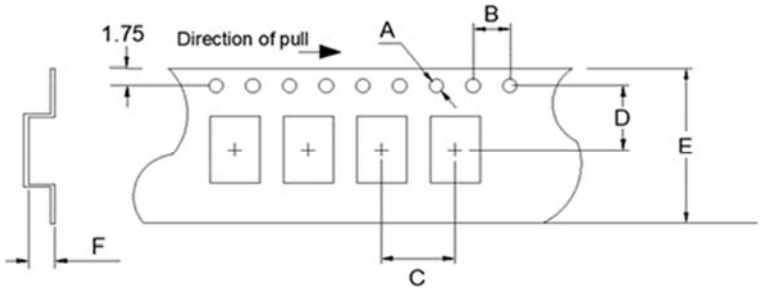
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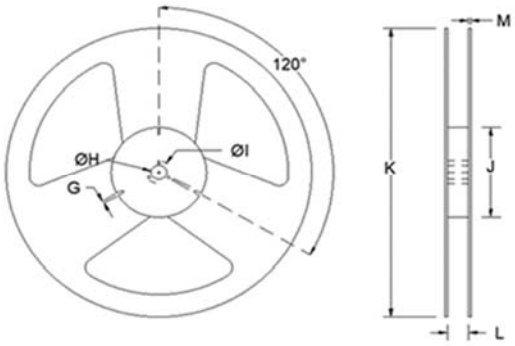
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Tape Specifications (millimeters)								Reel Specifications (millimeters)						
A	B	C	D	E	F	Reel Qty		G	H	I	J	K	L	M
Ø1.5	4.0	8.0	7.5	16.0	2.15	-T1 = 1,000 -T2 = 2,000		2.0	Ø13	Ø21	Ø80	Ø255	17.5	2.0





Available Options & Part Identification*

Example: F O7HH A B M 25.0

F	O7HH	A	B	M	25.0
Fox	**Model Number**	**Voltage**	**Stability**	**Operating Temperature**	**Frequency (MHz)**
		A = 5V±10%	A = ±100 PPM **B = ±50 PPM** D = ±25 PPM E = ±20 PPM	E = -10 to +70ºC **M = -40 to +85ºC**	

*Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities and op temps on page 1.

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