FO7HH

(Former F3345 Series)

7mm x 5mm

HCMOS SMD Oscillator

Features

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

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

ENABLE / DISABLE FUNCTION	
Pin 1	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

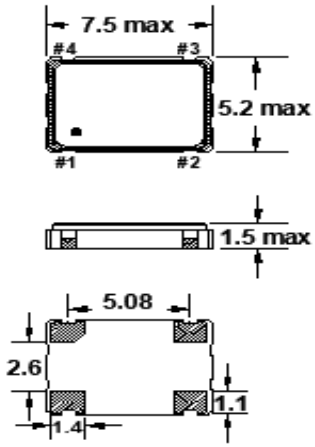
Available Options by Stability & Operating Temp		
Frequency Stability	**Operating Temperature (°C)**	**Frequency Range (MHz)**
±100PPM[2]	-10 ~ +70	1.000 ~ 125.000
±100PPM[2]	-40 ~ +85	1.000 ~ 125.000
±50PPM[2]	-10 ~ +70	1.000 ~ 125.000
±50PPM[2]	-40 ~ +85	1.000 ~ 125.000
±25PPM[2]	-10 ~ +70	1.000 ~ 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

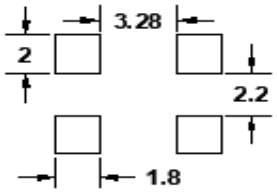
[2] Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, Reflow, one year aging, shock, and vibration.

[3] Inclusive of 25°C tolerance and 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)	N/A
Termination Finish	Au (0.3~1µm) over Ni (1.27~8.89µm)
Seal Method	Seam
Lead (Pb) Free	Yes
RoHS Compliant	Yes, no exemptions
REACH Compliant (latest version)	Yes

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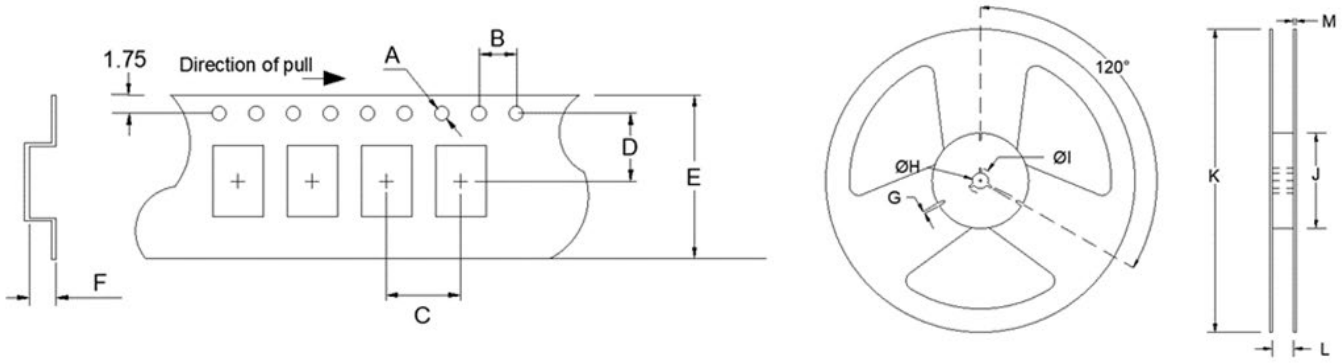
TAPE SPECIFICATIONS (mm)							REEL SPECIFICATIONS (mm)						
A	B	C	D	E	F	REEL QTY	G	H	I	J	K	L	M
ø1.5	4.0	8.0	7.5	16.0	2.15	-T1 = 1,000	2.0	Ø13	Ø21	Ø80	Ø255	17.5	2.0



Available Options & Part Identification*

Sample PN: FO7HHABM25.0-T1

F	O7HH	A	B	M	25.0	-T1
Fox	**Model Number**	**Voltage** **A = 5V±10%**	**Stability** A = ±100 PPM **B = ±50 PPM** D = ±25 PPM E = ±20 PPM	**Operating Temperature** E = -10 to +70°C **M = -40 to +85°C**	**Frequency (MHz)**	**Values Added Options** Blank = Bulk **T1 = 1,000 pcs**

* Not all frequencies in the frequency range, or every combination of stability, temp range, and voltage available. See stabilities and op temps for each V_{DD}.

Reliability Test Conditions
Please contact Abracon Quality Assurance department

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ABRACON:

F3340-2.048MHZ F3345-640 F3345-240 F3346-37.056MHZ F3345-400 F3345-500 F3345-120 F3345-250 F3345-143 F3345-200 F3345-10.000MHZ F3345-018 F3345-160 F3345-320 F3345-7.3728MHZ F3345-125 F3345-800 F3340R-11.0592 F3340-32.0000MHZ F3345R-14.7456MHZ F3345R-8Mhz FO7HHADE37.056-BULK FO7HHADM12.288-T1 FO7HHAAM20.0-BULK FO7HHAAM3.072-BULK FO7HHAAM32.0-BULK FO7HHAAM6.144-BULK FO7HHAAM64.0-BULK FO7HHABM1.0-BULK FO7HHAAE1.8-T1 FO7HHAAM18.432-T1 FO7HHAAE1.8432-T2 FO7HHAAE10.0-T2 FO7HHAAE12.0-T2 FO7HHAAE12.288-T1 FO7HHAAE12.288-T2 FO7HHABM4.9152-T1 FO7HHABM4.9152-T2 FO7HHADE37.056-T1 FO7HHADE37.056-T2 FO7HHADM14.745-T1 FO7HHADM14.745-T2 FO7HHABM14.7456-T1 FO7HHABM14.7456-T2 FO7HHABM2.4576-T1 FO7HHABM2.4576-T2 FO7HHABM25.176-T2 FO7HHABM1.0-T2 FO7HHABM11.0592-T1 FO7HHABM11.0592-T2 FO7HHABM12.288-T1 FO7HHABM12.288-T2 FO7HHAAM3.6864-T1 FO7HHAAM3.6864-T2 FO7HHAAM7.3728-T1 FO7HHAAM7.3728-T2 FO7HHAAM9.8304-T1 FO7HHAAM9.8304-T2 FO7HHAAM19.6608-T1 FO7HHAAM19.6608-T2 FO7HHAAM22.1184-T1 FO7HHAAM22.1184-T2 FO7HHAAM29.4912-T1 FO7HHAAM29.4912-T2 FO7HHAAM14.7456-T2 FO7HHAAM16.384-T2 FO7HHAAM18.432-T2 FO7HHAAM18.869-T1 FO7HHAAM18.869-T2 FO7HHAAM1.0-T2 FO7HHAAM1.8432-T2 FO7HHAAM11.059-T1 FO7HHAAM11.059-T2 FO7HHAAM14.7456-T1 FO7HHAAE33.333-T1 FO7HHAAE33.333-T2 FO7HHAAE40.0-T2 FO7HHAAE50.0-T2 FO7HHAAE64.0-T2 FO7HHAAE80.0-T2 FO7HHAAE29.4912-T2 FO7HHAAE3.6864-T1 FO7HHAAE3.6864-T2 FO7HHAAE32.0-T2 FO7HHAAE32.768-T1 FO7HHAAE32.768-T2 FO7HHAAE20.0-T2 FO7HHAAE22.1184-T1 FO7HHAAE22.1184-T2 FO7HHAAE24.0-T2 FO7HHAAE25.0-T2 FO7HHAAE29.4912-T1 FO7HHAAE14.31818-T2 FO7HHAAE14.7456-T1 FO7HHAAE14.7456-T2 FO7HHAAE16.0-T2 FO7HHAAE18.432-T1 FO7HHAAE18.432-T2