

Features

- HCMOS Output
- Stabilities to ± 20 PPM
- Temperature Ranges to -40°C to $+85^{\circ}\text{C}$
- Supply Voltage: 5.0V

ELECTRICAL CHARACTERISTICS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range (F_0)	1 ~ 125MHz
Temperature Range	
Storage (T_{STG})	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Supply Voltage (V_{DD})	5.0V $\pm 10\%$
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 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

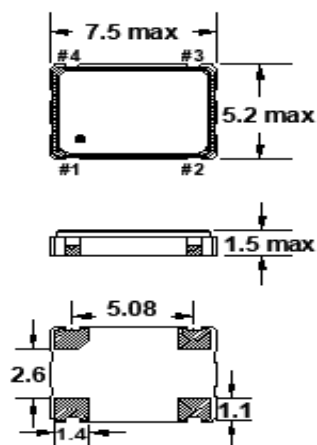
Available Options by Stability & Operating Temp		
Frequency Stability	Operating Temperature ($^{\circ}\text{C}$)	Frequency Range (MHz)
$\pm 100\text{PPM}^2$	$-10 \sim +70$	1.000 ~ 125.000
$\pm 100\text{PPM}^2$	$-40 \sim +85$	1.000 ~ 125.000
$\pm 50\text{PPM}^2$	$-10 \sim +70$	1.000 ~ 125.000
$\pm 50\text{PPM}^2$	$-40 \sim +85$	1.000 ~ 125.000
$\pm 25\text{PPM}^2$	$-10 \sim +70$	1.000 ~ 125.000
$\pm 25\text{PPM}^3$	$-40 \sim +85$	1.000 ~ 80.000
$\pm 20\text{PPM}^3$	$-10 \sim +70$	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

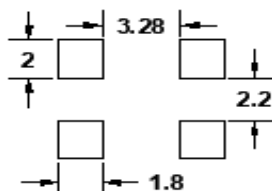
² Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, Reflow, one year aging, shock, and vibration.

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 castellations, 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

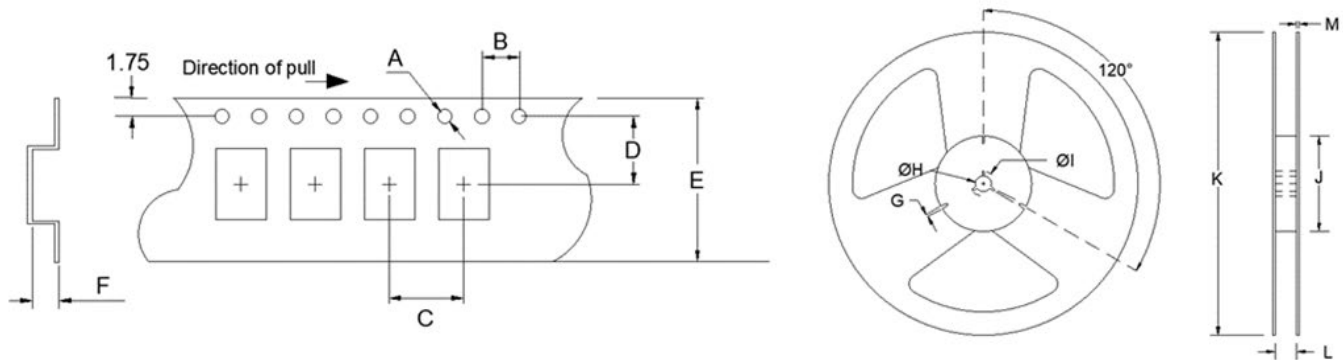
FO7HH

(Former F3345 Series)

7mm x 5mm
HCMOS 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	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

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

ABRACON:

[FO7HHAAM32.0](#) [FO7HHAAE20.0-T1](#) [FO7HHAAE40.0-T1](#) [FO7HHAAE32.768-BULK](#) [FO7HHADE10.0-T2](#)
[FO7HHAAE14.31818-BULK](#) [FO7HHAAE24.0-T1](#) [FO7HHAAE33.0-BULK](#) [FO7HHAAE64.0-BULK](#) [FO7HHAAE80.0-BULK](#) [FO7HHAAM7.3728-BULK](#) [FO7HHABM20.0-BULK](#) [FO7HHAAE14.7456-BULK](#) [FO7HHAAE24.0-BULK](#)
[FO7HHAAE33.333-BULK](#) [FO7HHAAE48.0-BULK](#) [FO7HHAAE9.8304-BULK](#) [FO7HHAAM16.0-BULK](#) [FO7HHADE10.0-BULK](#) [FO7HHAAE18.432-BULK](#) [FO7HHAAE20.0-BULK](#) [FO7HHAAE4.096-BULK](#) [FO7HHAAE32.0-BULK](#)
[FO7HHAAE8.0-BULK](#) [FO7HHABM25.0-T1](#) [FO7HHABM25.0-T2](#) [FO7HHAAE19.2-BULK](#) [FO7HHAAE35.0-T1](#) [FO7HHAAE40.0-BULK](#) [FO7HHAAM25.0-BULK](#) [FO7HHAAM3.6864-BULK](#) [FO7HHAAM50.0-BULK](#)
[FO7HHAAE1.8432-BULK](#) [FO7HHAAE25.0-BULK](#) [FO7HHAAE64.0-T1](#) [FO7HHAAE1.0-BULK](#) [FO7HHAAE10.0-BULK](#) [FO7HHAAE29.4912-BULK](#) [FO7HHAAE3.6864-BULK](#) [FO7HHAAE66.0-BULK](#) [FO7HHABM7.3728-BULK](#)
[FO7HHAAE12.0-BULK](#) [FO7HHAAE16.0-BULK](#) [FO7HHADE10.0-T1](#) [FO7HHAAE12.288-BULK](#) [FO7HHAAE22.1184-BULK](#) [FO7HHAAE35.0-BULK](#) [FO7HHAAE40.68-BULK](#) [FO7HHAAE50.0-BULK](#) [FO7HHAAE2.304-BULK](#)
[FO7HHAAE35.0-T2](#) [FO7HHAAM40.0-BULK](#) [FO7HHADE3.6864-BULK](#) [FO7HHAAE19.2-T2](#) [FO7HHAAE33.0-T1](#) [FO7HHAAE80.0-T1](#) [FO7HHAAM12.0-T2](#) [FO7HHAAM16.0-T1](#) [FO7HHAAM20.0-T1](#) [FO7HHAAM20.0-T2](#)
[FO7HHAAM6.144-T2](#) [FO7HHABE25.0-T1](#) [FO7HHAAE14.31818-T1](#) [FO7HHAAE40.68-T2](#) [FO7HHAAM1.8-T2](#) [FO7HHAAM10.0-T1](#) [FO7HHAAM25.0-T1](#) [FO7HHABE6.0-T2](#) [FO7HHABM20.0-T2](#) [FO7HHAAE12.0-T1](#)
[FO7HHAAM2.56-T2](#) [FO7HHAAE2.304-T1](#) [FO7HHAAE33.0-T2](#) [FO7HHAAE66.0-T1](#) [FO7HHAAE66.0-T2](#) [FO7HHAAE8.0-T2](#) [FO7HHAAM20.48-T2](#) [FO7HHAAM3.2-T2](#) [FO7HHAAM40.0-T2](#) [FO7HHAAM5.0-T2](#)
[FO7HHAAM50.0-T1](#) [FO7HHAAM8.0-T1](#) [FO7HHABM1.024-T1](#) [FO7HHABM1.024-T2](#) [FO7HHADM16.0-T1](#) [FO7HHADM16.0-T2](#) [FO7HHAEE63.0-T1](#) [FO7HHAAM24.0-T1](#) [FO7HHAAM3.0-T2](#) [FO7HHAAM40.0-T1](#)
[FO7HHABM10.0-T2](#) [FO7HHABM3.579545-T2](#) [FO7HHADM17.734475-T2](#) [FO7HHADM2.0-T2](#) [FO7HHADM80.0-T1](#) [FO7HHAAM66.0-T1](#) [FO7HHABE2.304-T2](#) [FO7HHABM20.0-T1](#) [FO7HHAEE10.0-T1](#) [FO7HHAEE18.874368-T1](#)