

## Features

- VCXO
- Supply Voltage: 3.3V

3.3V SPECIFICATIONS	
PARAMETERS	MAX (Unless otherwise noted)
Frequency Range	1.000~ 96.000 MHz
Temperature Range	
Operating (T <sub>OPR</sub> )	See table and options below
Storage (T <sub>STG</sub> )	-40°C ~ +85°C
Frequency Stability	See options below
Pullability (V <sub>C</sub> = 1.65V ± 1.5V)	See options below
Supply Voltage (V <sub>DD</sub> )	3.3V ± 5%
Control Voltage (V <sub>C</sub> ) <sup>2</sup>	1.65V ± 1.5V
Input Current (I <sub>DD</sub> )	
1.0 ~ 30MHz	15 mA
>30.0 ~ 45MHz	25 mA
>45.0 ~ 96MHz	50 mA
Output Symmetry (50% V <sub>DD</sub> )	40% ~ 60%
Rise/Fall Time (10% ~ 90% V <sub>DD</sub> ) (T <sub>R</sub> /T <sub>F</sub> )	5 nS
Output Voltage (V <sub>OL</sub> )	+0.4V (I <sub>OL</sub> = +5mA)
(V <sub>OH</sub> )	V <sub>DD</sub> - 0.4V Min (I <sub>OH</sub> = -5mA)
Output Load (HCMOS)	15 pF
Start-up Time (T <sub>S</sub> )	10 mS
Enable/Disable Time <sup>3</sup>	150 nS
Frequency Linearity	± 10%
Modulation Bandwidth	20 kHz Min

ENABLE / DISABLE FUNCTION	
E/D (Pin 2) <sup>1</sup>	Output (pin 4)
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

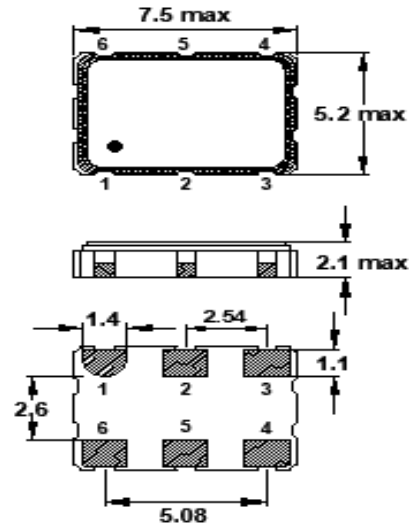
Available Options by Stability & Operating Temp		
Frequency Stability	Operating Temperature (°C)	Frequency Range (MHz)
±100PPM <sup>2</sup>	-10 ~ +70	1.0 ~ 96.0
±100PPM <sup>2</sup>	-40 ~ +85	1.0 ~ 96.0
±50PPM <sup>2</sup>	-10 ~ +70	1.0 ~ 96.0
±50PPM <sup>2</sup>	-40 ~ +85	1.0 ~ 96.0
±25PPM <sup>2</sup>	-10 ~ +70	1.0 ~ 96.0
±25PPM <sup>3</sup>	-40 ~ +85	1.0 ~ 96.0

<sup>1</sup> An internal pull-up resistor from pin 2 to pin 6 allows active output if pin 2 is left open (no connect).

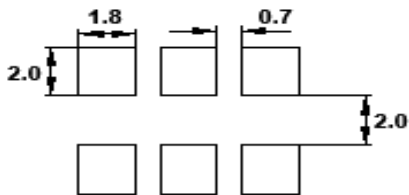
<sup>2</sup> Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, shock, Vibration, reflow, and one-year aging and V<sub>C</sub>=1.65V.

<sup>3</sup> Inclusive of 25°C tolerance, operating temperature range and V<sub>C</sub>=1.65V.

### DIMENSIONS / MECHANICAL SPECIFICATIONS



#### Recommended Solder Pad Layout



Dimensions are in millimeters.

#### Pin Connections

#1 VC      #4 Output  
#2 E/D    #5 N.C.  
#3 GND    #6 V<sub>DD</sub>

Note:

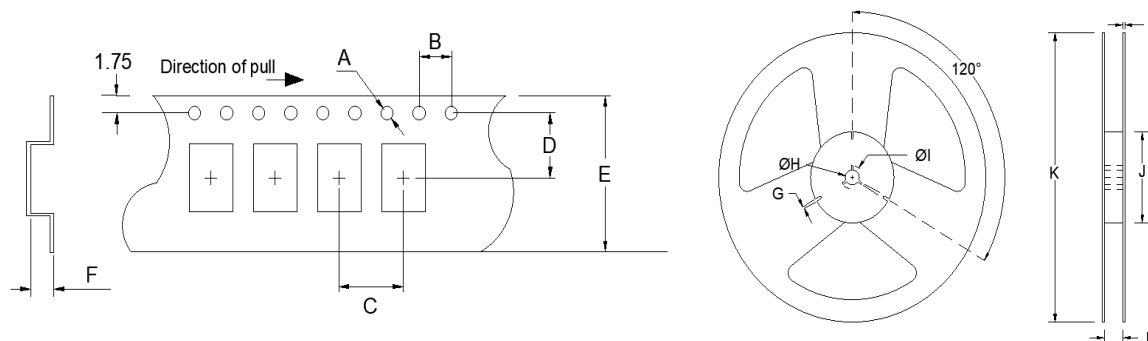
\*A 0.01μF capacitor should be placed between V<sub>DD</sub> (Pin 6) and GND (Pin 3) to minimize power supply line noise.

\*Dimensional drawing is for reference to critical specifications defined by size measurements. Certain non-critical visual attributes, such as side castellations,

### 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
ø1.55	4.0	8.0	7.5	16.0	2.15	-T2 = 2,000 -T1 = 1,000	2.0	ø13	ø21	ø80	ø255	17.5	2.0



## Available Options &amp; Part Identification for HCMOS VCXO FY7H\*

Sample PN: FY7HCJM27.0-T2

F	Y7H	C	J	M	27.0	-T2
<b>Fox</b>	<b>Model Number</b>	<b>Voltage</b> C = 3.3V±10%	<b>Stability/Pullability</b> E = ±25PPM/±50PPM F = ±50PPM/±50PPM H = ±25PPM/±100PPM J = ±50PPM/±100PPM K = ±100PPM/±100PPM	<b>Operating Temperature</b> E = -10 to +70°C M = -40 to +85°C	<b>Frequency (MHz)</b>	<b>Values Added Options</b> Blank = Bulk T1 = 1,000 pcs T2 = 2,000 pcs

\* Not all frequencies in the frequency range, or every combination of stability, operating temperature range, and supply voltage available.

## Reliability Test Conditions

Please contact Abracon Quality Assurance department

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