



actual size

# Oscillator · JO75H · 5.0 V

High Stability Oscillator with Stop Function · 7.5 x 5.0 mm

- tight tolerance down to  $\pm 10$  ppm
- reflow soldering temperature: 260 °C max.
- ceramic/metal package



## General Data

type	JO75H 5.0 V high stability	
frequency range	1.80 ~ 50.0 MHz	
frequency stability over all*	$\pm 10$ ppm ~ $\pm 20$ ppm see table 1	
current consumption	see table 2	
supply voltage $V_{DC}$	5.0 V $\pm 5\%$	
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-55 °C ~ +125 °C
output	rise & fall time	see table 3
	load max.	15pF / 30 pF
	current max.	4mA
	low level max.	0.1 x $V_{DC}$
	high level min.	0.9 x $V_{DC}$
output enable time max.	5ms	
output disable time max.	150ns	
start-up time max.	5ms	
standby function	stop	
standby current max.	50 $\mu$ A	
phase jitter 12 kHz ~ 20.0 MHz	< 1.0ps RMS	
symmetry at 0.5 x $V_{DC}$	45% ~ 55% max.	

Table 1: Frequency Stability Code

stability code	D	E	F			
	$\pm 20$ ppm	$\pm 15$ ppm	$\pm 10$ ppm			
-10 °C ~ +70 °C	○	△	△			
-40 °C ~ +85 °C	○	△				

○ available    △ excludes shock and vibration

\* includes stability at 25 °C, operating temp. range, supply voltage change, shock and vibration, aging 1st year.

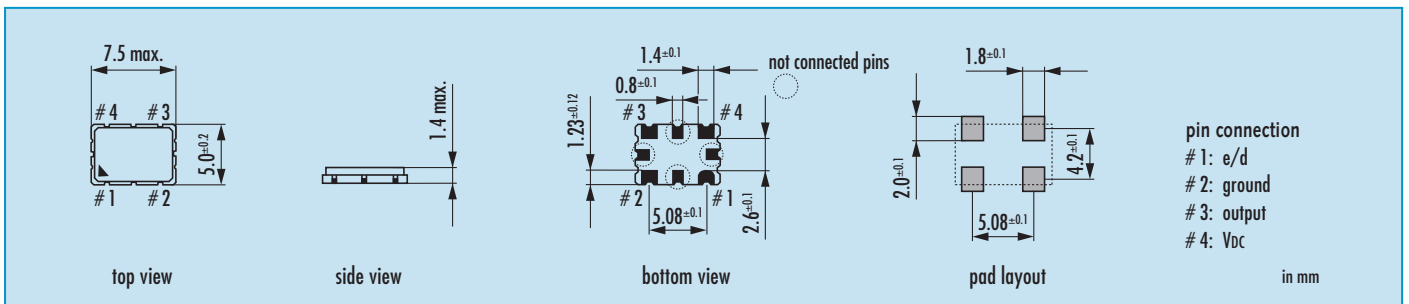
Table 2: Current Consumption max.

Current at 15pF load		Current at 30pF load	
1.8 ~ 19.9 MHz	10 mA	1.8 ~ 19.9 MHz	18 mA
20.0 ~ 50.0 MHz	22 mA	20.0 ~ 50.0 MHz	35 mA

Table 3: Rise & Fall Time max.

5.0 ns: 1.80 ~ 50.0 MHz	<b>note:</b> - specific data on request - rise time: 0.1 $V_{DC}$ ~ 0.9 $V_{DC}$ - fall time: 0.9 $V_{DC}$ ~ 0.1 $V_{DC}$
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## Dimensions



## Order Information

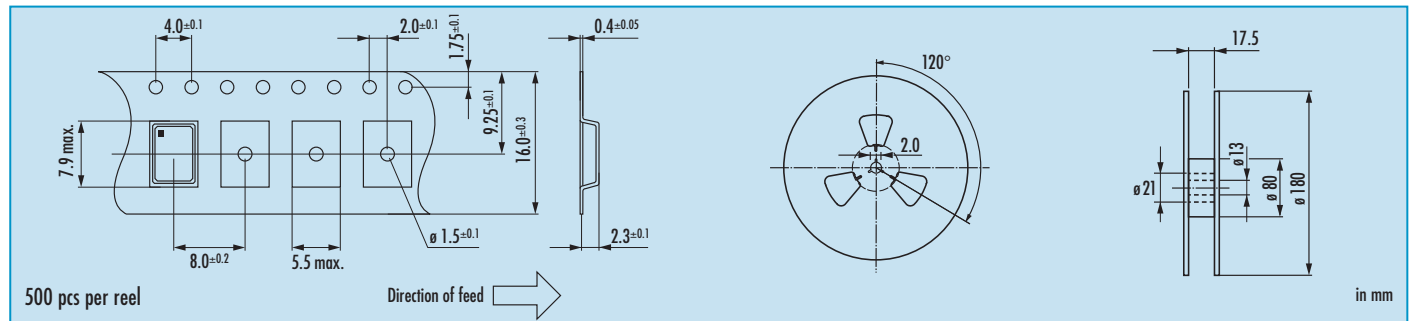
0	frequency	type	frequency stability code	supply voltage code	output load code	option
Oscillator	1.80 ~ 50.0 MHz	JO75H	see table 1	5.0 = 5.0 V	1 = 15 pF 2 = 30 pF	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 20.0-JO75H-D-5.0-1 (LF = RoHS compliant / Pb free pads)



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## Taping Specification



## Enable / Disable Function

pin #1 (e/d control)	pin #3 (output)
open	active
high "1" ( $V_{IH} \geq 0.8 V_{DC}$ )	active
low "0" ( $V_{IL} \leq 0.2 V_{DC}$ )	high impedance

**stop function:**

- oscillator stops
- output high impedance

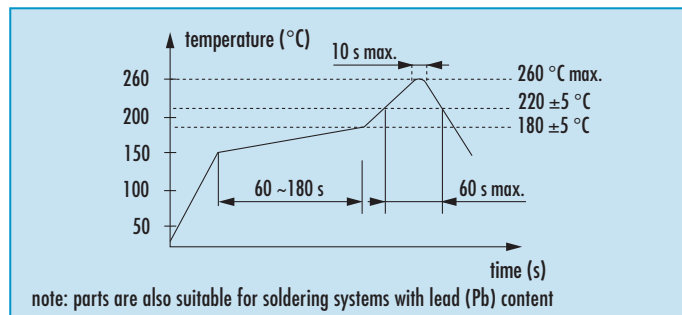
## Marking

frequency type / date code

date code:  
 A ~ M: Jan. - Dec.  
 9: 2009  
 0: 2010  
 1: 2011

Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F
July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

## Reflow Soldering Profile



## Packing Note

- standard packing units are 500 pieces per reel
- non-multiple packing units are only supplied taped / bulk