



actual size

Oscillator · JO75H · 3.3 V

High Stability Oscillator with Stop Function · 7.5 x 5.0 mm

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



General Data

type	JO75H 3.3 V high stability
frequency range	1.80 ~ 50.0 MHz
frequency stability over all*	± 10 ppm ~ ± 20 ppm see table 1
current consumption	see table 2
supply voltage V_{DC}	3.3 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 / 30pF current max.: 4mA low level max.: $0.1 \times V_{DC}$ high level min.: $0.9 \times V_{DC}$
output enable time max.	5ms
output disable time max.	150ns
start-up time max.	5ms
standby function	stop
standby current max.	50 μ A
phase jitter 12 kHz ~ 20.0 MHz	< 1.0ps RMS
symmetry at $0.5 \times V_{DC}$	45% ~ 55% max.

Table 1: Frequency Stability Code

stability code	D ± 20 ppm	E ± 15 ppm	F ± 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.

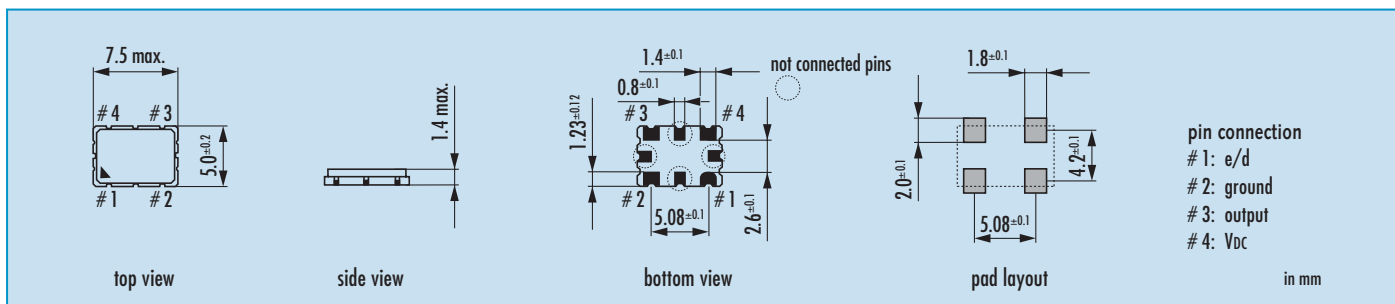
Table 2: Current Consumption max.

Current at 15pF load		Current at 30pF load	
1.8 ~ 19.9 MHz	10 mA	1.8 ~ 19.9 MHz	15 mA
20.0 ~ 50.0 MHz	22 mA	20.0 ~ 50.0 MHz	25 mA

Table 3: Rise & Fall Time max.

5.0 ns: 1.80 ~ 50.0 MHz	note: - specific data on request - rise time: $0.1 V_{DC} \sim 0.9 V_{DC}$ - fall time: $0.9 V_{DC} \sim 0.1 V_{DC}$
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Dimensions



Order Information

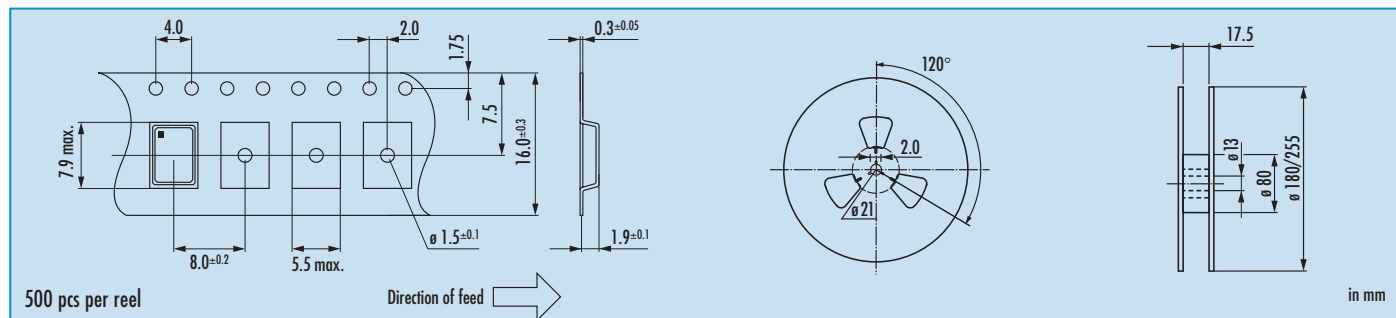
0	frequency	type	frequency stability code	supply voltage code	output load code	option
Oscillator	1.80 ~ 50.0 MHz	JO75H	see table 1	3.3 = 3.3 V	1 = 15 pF 2 = 30 pF	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 20.0-JO75H-D-3.3-1 (LF = RoHS compliant / Pb free pads)



Oscillator · JO75H · 3.3 V · High Stability

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	

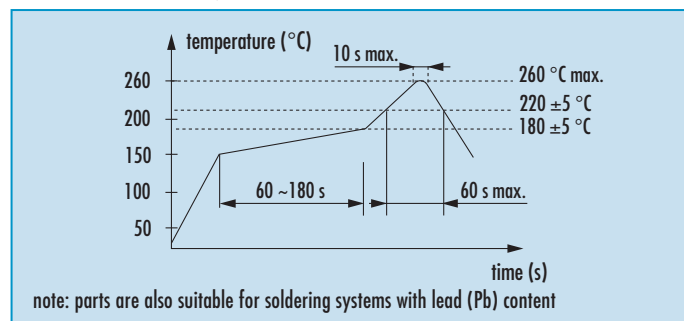
Marking

frequency type / date code

date code:
 A ~ M: Jan. - Dec.
 5: 2005
 6: 2006
 7: 2007

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