Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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actual size

Oscillator JO22H · 3.3 V

- High Stability Oscillator with Stop Function • 2.5 x 2.0 mm
- Stability suitable for wireless application (Bluetooth, WiFi etc.)
- LVCMOS / HCMOS compatible output
- Low phase jitter, no PLL
- Flat seam sealed ceramic/metal package

RoHS 2011/65/EC compliant · Pb free · REACH compliant · Conflict mineral free

GENERAL DATA

TYPE		JO22H 3.3 V
frequency range		4.0 ~ 54.0 MHz (15 pF max.)
frequency stability over all*		± 10ppm ~ ± 20ppm see table 1
current consumption		7 mA max.
supply voltage V_{DC}		3.3 V ± 5%
temperature	operating	-20 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	5 nsec max.
	load max.	15 pF
	current max.	4.0 mA
	low level max.	0.1 V x V_{DC}
	high level min.	0.9 V x V_{DC}
output enable time max.		10 ms
output disable time max.		250 ns
start-up time max.		10 ms
standby function		stop
standby current max.		10 µA
phase jitter 12 kHz ~20 MHz		< 3.0 ps RMS typ.
symmetry at 0.5 x V_{DC}		45% ~ 55% max.

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

TABLE 1: FREQUENCY STABILITY CODE

stability code	D ± 20 ppm	E ±15 ppm	F ± 10 ppm	
-20 °C ~ +70 °C	O	O	O	
-40 °C ~ +85 °C	O	O	O	

O available

TABLE 2: RISE & FALL TIME MAX.

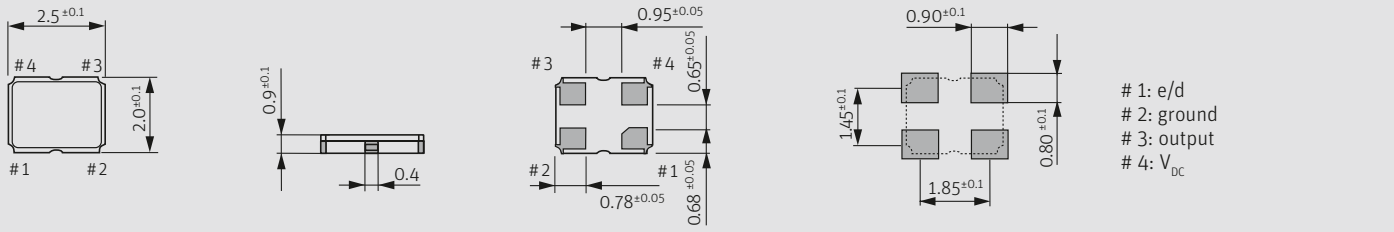
5 ns: 4.0 ~ 54.0 MHz	**note:** - specific data on request - rise time: 0.1 V_{DC} ~ 0.9 V_{DC} - fall time: 0.9 V_{DC} ~ 0.1 V_{DC}

ENABLE / DISABLE FUNCTION

pin #1 (e/d control)	pin #3 (output)
open	active
high "1" (V_{IH} ≥ 0.7 V_{DC})	active
low "0" (V_{IL} ≤ 0.3 V_{DC})	high impedance

stop function:
- oscillator stops
- output high impedance

DIMENSIONS



top view · side view · bottom view · pad layout · pin connection · in mm

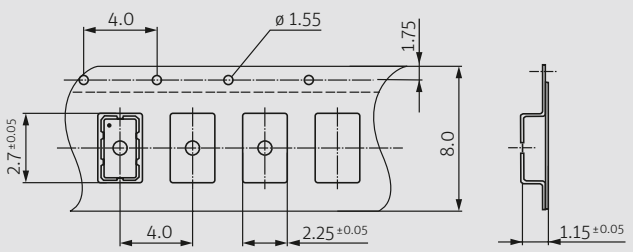
ORDER INFORMATION

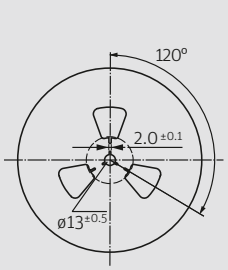
0	frequency	– type	– frequency stability code	– supply voltage code	– output load code	– option
Oscillator	4.0 ~ 54.0 MHz	JO22H	see table 1	3.3 = 3.3 V	1 = 15 pF	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C

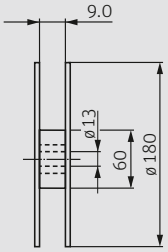
Example: O 20.0-JO22H-F-3.3-1-T1 (Suffix LF = RoHS compliant / Pb free)

Oscillator JO22H · 3.3 V · Low Power

TAPING SPECIFICATION



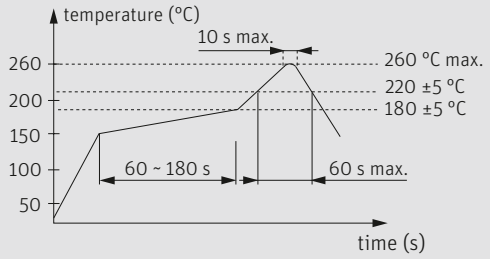




500 pcs per reel, 1000 pcs per reel on request Feeding

in mm

REFLOW SOLDERING PROFILE



note: parts are also suitable for soldering systems with lead (Pb) content

MARKING

frequency
company stability code / data code

data code: A ~ M: Jan. - Dec.

7: 2017 8: 2018 9: 2019 0: 2020 1: 2021 2: 2022

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

PACKAGING NOTE

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