



actual size

Oscillator JO75 · 5.0 V

- SMD Oscillator with Tristate Function · 7.5 x 5.0 mm
- HCMOS compatible output
- Low phase jitter, no PLL
- Seam sealed ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA

TYPE		JO75 5.0 V
frequency range		1.8 ~ 80.0 MHz (15 pF / 30 pF / 50 pF opt.)
		80.0 ~ 107.0 MHz (15 pF) on request
frequency stability over all*		± 20 ppm ~ ± 100 ppm (table 1)
current consumption		see table 2
supply voltage V_{DC}		5.0 V ± 10 %
temperature	operating	-10°C ~ +70°C / -40°C ~ +85°C
	storage	-55°C ~ +125°C
output	rise & fall time	see table 3
	load max.	15 pF / 30 pF / 50 pF
	current max.	16 mA
	low level max.	0.1 x V_{DC}
	high level min.	0.9 x V_{DC}
output enable time max.		100 ns
output disable time max.		100 ns
start-up time max.		10 ms
standby function		tristate
phase jitter 12 kHz ~ 20.0 MHz		< 1.0 ps RMS
symmetry at 0.5 x V_{DC}		45% ~ 55% typ. (40% ~ 60% max.)

note: Suffix "X" includes 10 years aging, for A, B, G available.

TABLE 1: FREQUENCY STABILITY CODE

stability code		A	B	G	C	D
		± 100 ppm	± 50 ppm	± 30 ppm	± 25 ppm	± 20 ppm
-10°C ~ +70°C	STD		◇	○	○	△
-40°C ~ +85°C	T1	○	◇	○	△	

◇ standard ○ available △ excludes shock and vibration

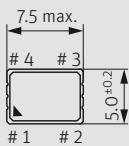
TABLE 2: CURRENT CONSUMPTION MAX.

Current at 15 pF load:	Current at 30 pF load:	Current at 50 pF load:
1.8 ~ 19.9 MHz 12 mA	1.8 ~ 19.9 MHz 15 mA	1.8 ~ 19.9 MHz 20 mA
20.0 ~ 39.9 MHz 20 mA	20.0 ~ 39.9 MHz 28 mA	20.0 ~ 39.9 MHz 35 mA
40.0 ~ 59.9 MHz 30 mA	40.0 ~ 59.9 MHz 35 mA	40.0 ~ 59.9 MHz 40 mA
60.0 ~ 79.9 MHz 45 mA	60.0 ~ 80.0 MHz 52 mA	60.0 ~ 80.0 MHz 60 mA
80.0 ~ 107.0 MHz 60 mA		

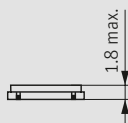
TABLE 3: RISE & FALL TIME MAX.

6.0 ns: 1.8 ~ 9.9 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}
5.0 ns: 10.0 ~ 39.9 MHz	
4.0 ns: 40.0 ~ 69.9 MHz	
3.0 ns: 70.0 ~ 170.0 MHz	

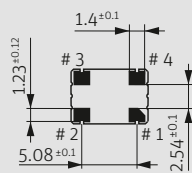
DIMENSIONS



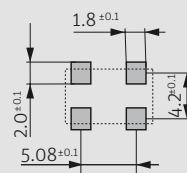
top view



side view



bottom view



pad layout

1: e/d
2: ground
3: output
4: V_{DC}

pin connection

in mm

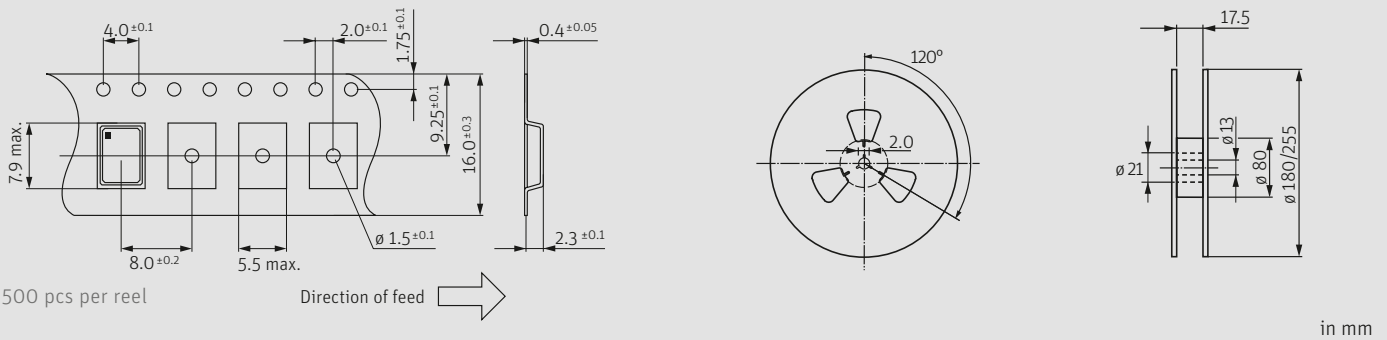
ORDER INFORMATION

0	frequency	type	frequency stability code	supply voltage code	output load code	option
Oscillator	1.8 ~ 80.0 MHz 80.0 ~ 107.0 MHz on request	JO75	see table 1	5.0 = 5.0V	1 = 15 pF std. > 80 MHz 2 = 30 pF std. < 80 MHz 3 = 50 pF opt. < 80 MHz	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: 0 20.0-JO75-B-5.0-1 (Suffix LF = RoHS compliant / Pb free)

Oscillator J075 · 5.0 V · Tristate Function

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 active
- output high impedance

MARKING

frequency

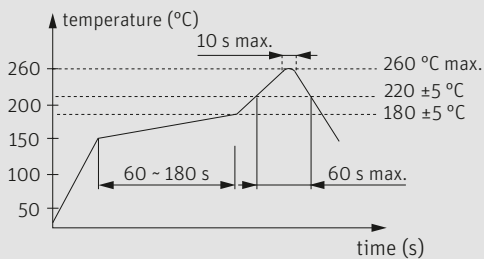
company stability code / voltage data code

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

REFLOW SOLDERING PROFILE



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

PACKAGING NOTE

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