



actual size

Oscillator · JO21 · 1.8 V

SMD Oscillator with Stop Function · 2.0 x 1.6 mm

- ultra small package
- very low current consumption
- reflow soldering temperature: 260 °C max.
- ultra flat ceramic / metal package



General Data

type	JO21 1.8 V
frequency range	1.6250 ~ 54.0 MHz
frequency stability over all*	± 25 ppm ~ ± 100 ppm see table 1
current consumption	see table 2
supply voltage V _{DC}	1.8 V ± 10%
temperature	operating** -20 °C ~ +70 °C / -40 °C ~ +85 °C storage -65 °C ~ +125 °C
output	rise & fall time see table 3 load max 15 pF current max. 4 mA low level max. 0.1 x V _{DC} high level min. 0.9 x V _{DC}
output enable time max.	10 ms
output disable time max.	200 ns
start-up time max.	10 ms
standby function	stop
standby current max.	10 µA
symmetry at 0.5 x V _{DC}	45% ~ 55% max.

** ask if a 105 °C version is available

Table 1: Frequency Stability Code

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

● standard ○ available D excludes aging

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

Table 2: Current Consumption max.

1.8 V: current at 15pF load:

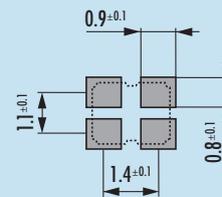
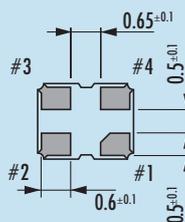
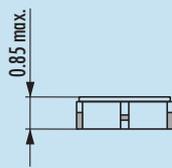
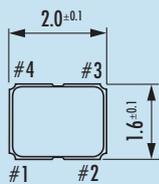
1.625 ~ 19.9 MHz	3.0 mA
20.000 ~ 39.9 MHz	4.5 mA
40.000 ~ 54.0 MHz	7.0 mA

Table 3: Rise & Fall Time max.

6 ns: 1.625 ~ 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}



Order Information

0	frequency	type	frequency stability code	supply voltage code	output load code	option
Oscillator	1.625 ~ 54.0 MHz	JO21	see table 1	1.8 = 1.8V	1 = 15 pF	

Example: O 20.0-JO21-B-1.8-1-T1-LF (LF = RoHS compliant / Pb free pins or pads)

