

actual size

# Oscillator · JO75 · 3.3/5.0 V

## Surface Mount Crystal Oscillator

### Features

- HCMOS / TTL compatible type
- tristate function
- ceramic / metal package

### General Data

type	JO75 3.3 V	JO75 5.0 V
frequency range	1.0 ~ 160.0 MHz	1.0 ~ 160.0 MHz
frequency stability over all <i>(inclusive stability at 25 °C, operating temp. range, input voltage change, aging, shock, vibration)</i>	± 50 ppm: JO75B3 (standard) ± 15 ppm ~ ± 100 ppm	± 50 ppm: JO75B5 (standard) ± 15 ppm ~ ± 100 ppm
current consumption max. <i>(special data on request)</i>	10 mA: 1.00 ~ 29.99 MHz 20 mA: 30.0 ~ 69.99 MHz 30 mA: 70.0 ~ 156.99 MHz 45 mA: 157.0 ~ 160.0 MHz	15 mA: 1.00 ~ 29.99 MHz 30 mA: 20.0 ~ 69.99 MHz 45 mA: 70.0 ~ 156.99 MHz 50 mA: 157.0 ~ 160.0 MHz
supply voltage	3.3 V ± 10 %	5.0 V ± 10 %
rise & fall time max.	6 ns	6 ns
output load	15 pF ~ 30 pF	15 pF ~ 30 pF (50 pF on request)
output current I <sub>OH</sub> max.	- 8 mA	- 16 mA
I <sub>OL</sub> min.	8 mA	16 mA
output low level	V <sub>DC</sub> x 0.1	V <sub>DC</sub> x 0.1
output high level	V <sub>DC</sub> x 0.9	V <sub>DC</sub> x 0.9
operating temperature	-10 °C ~ +70 °C / -40 °C ~ +85 °C	-10 °C ~ +70 °C / -40 °C ~ +85 °C
storage temperature	-55 °C ~ +125 °C	-55 °C ~ +125 °C
symmetry at 1/2 V <sub>DC</sub>	45 / 55 % typical	45 / 55 % typical
RMS jitter	< 10 ps	< 10 ps

### Preferred Types

3.3V: JO75-B-3-2 (± 50 ppm)  
5.0V: JO75-B-5-2 (± 50 ppm)

### Marking

frequency  
type / date code

date code: year/month  
example: 2A = 2002 January

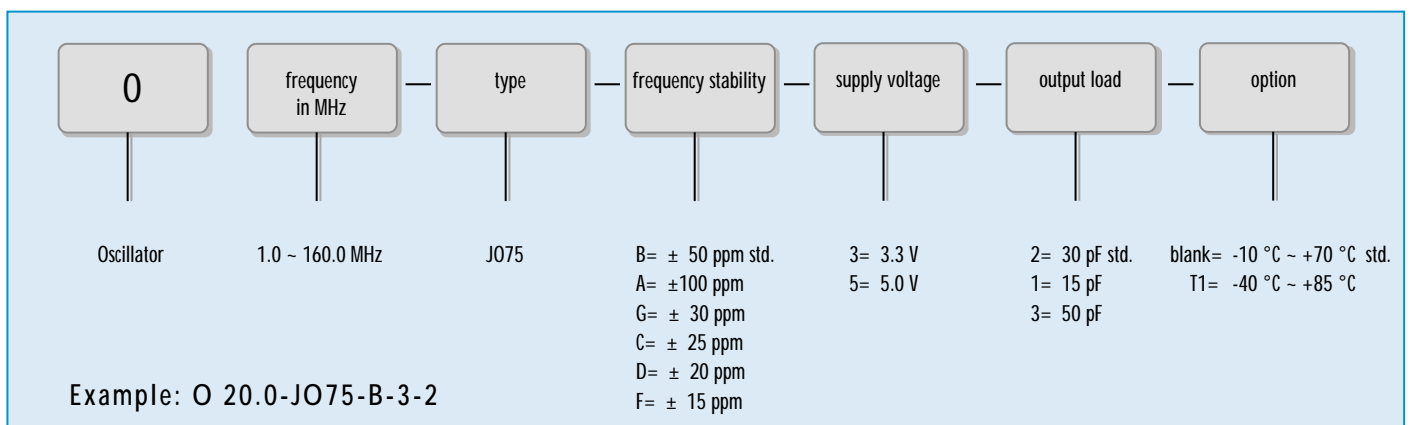
Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F
July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

### Enable / Disable Function

pin #1	pin #3
open or high	oscillation
gnd or low	high impedance

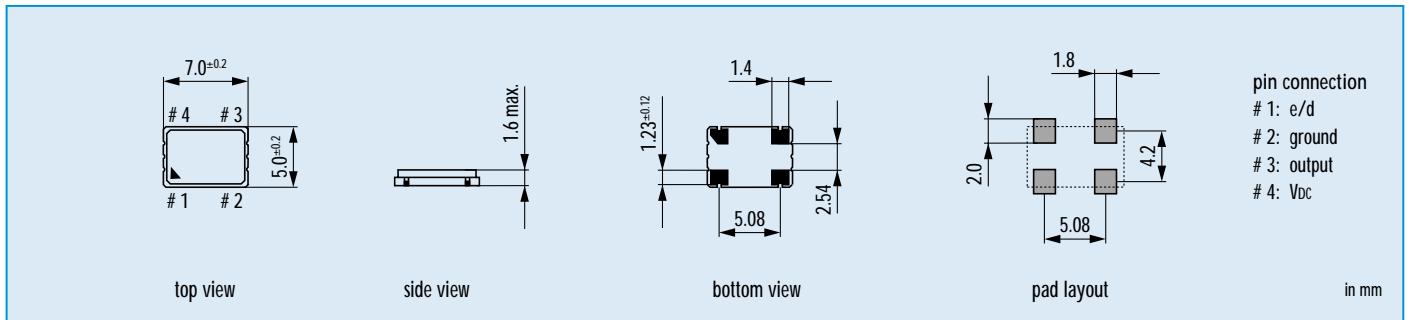
e/d delay time: 100 ns max.

### Order Information

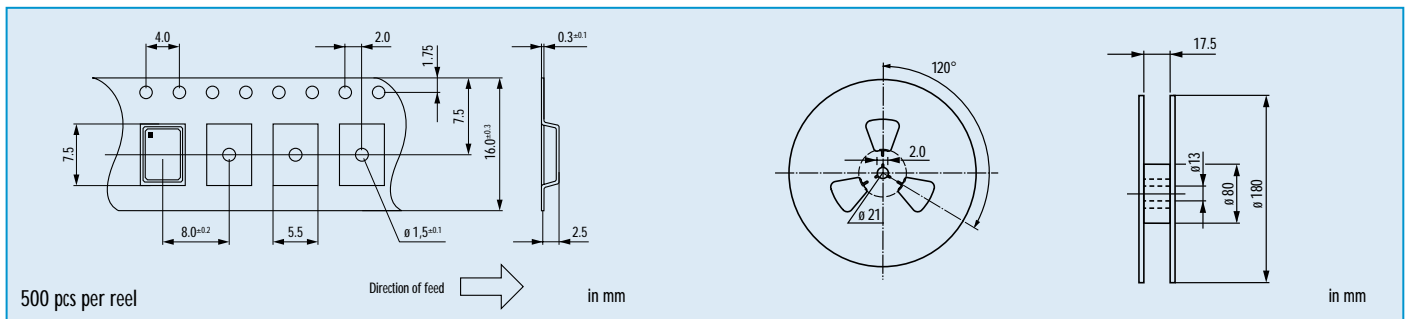


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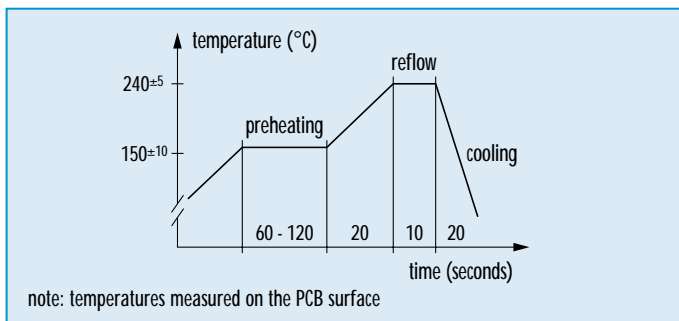
## Dimensions



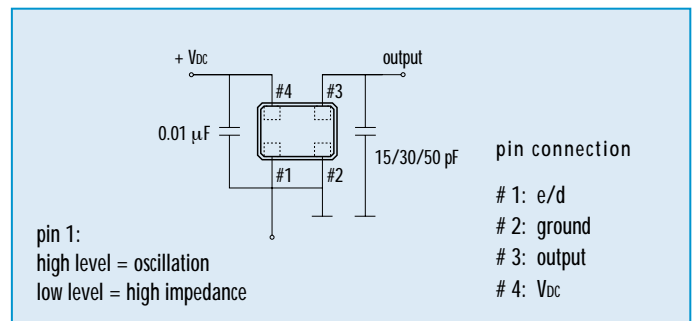
## Taping Specification



## Reflow Soldering Profile



## Test Circuit



## Environmental Conditions

1. shock:	DIN IEC 68-2-27 Test Ea, 100g, 6 ms, half sine wave, 3 bumps in main directions
2. vibration:	DIN IEC 68-2-6 Test Fc, 10 ~ 500 Hz, 10g, 2 hours in main directions
3. humidity:	DIN IEC 68-2-3 40°C/93% RH for 21 days
4. solderability:	CECC 008 02 - 7.2.1 infrared reflow condition

## Packing Note

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