



actual size

# Programmed Oscillator · JPO75 · 3.3/2.5V

## Programmed SMD CMOS Oscillator · 7.5 x 5.0 mm

- fast delivery service
- tristate function
- reflow soldering temperature: 260 °C max.
- RoHS compliant, ceramic/metal package



### General Data

<b>type</b>	<b>JPO75 3.3 V / 2.5 V</b>	
<b>frequency range</b>	3.0 ~ 200.0 MHz (3.3 V, 15 pF)	
	3.0 ~ 130.0 MHz (2.5 V, 15 pF)	
	3.0 ~ 80.0 MHz (3.3 V, 30 pF)	
	3.0 ~ 70.0 MHz (2.5 V, 30 pF)	
<b>frequency stability over all*</b>	+/-30ppm ~ +/-100ppm (see table 1)	
<b>current consumption</b>	see table 2	
<b>supply voltage V<sub>DC</sub></b>	3.3 V / 2.5 V +/-10%	
<b>temperature</b>	operating	-20°C ~ +70°C / -40°C ~ +85°C
	storage	-55°C ~ +125°C
<b>output</b>	rise & fall time	see table 3
	load max.	15pF / 30pF
	current max.	8mA (3.3 V) / 4mA (2.5 V)
	low level max.	0.4 V
	high level min.	V <sub>DC</sub> - 0.4 V
<b>standby function</b>	tristate (weak pull up)	
<b>output enable time max.</b>	100ns	
<b>output disable time max.</b>	250ns	
<b>start-up time max.</b>	10ms	
<b>symmetry at 0.5 x V<sub>DC</sub></b>	45% ~ 55% typ. (40% ~ 60% max. )	

Table 1: Frequency Stability Code

stability code	A	B	G
	± 100 ppm	± 50 ppm	± 30 ppm
-10 °C ~ +70 °C	○	○	●
-40 °C ~ +85 °C	○	●	-
	● standard ○ available		

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

Table 2: Current Consumption max.

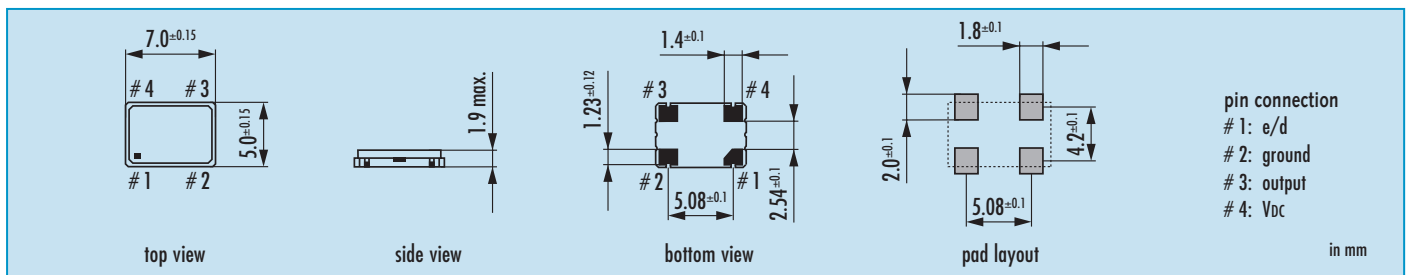
frequency range	V <sub>DC</sub> =3.3 V	V <sub>DC</sub> =2.5 V	load
3.0 ~ 70.0 MHz	-	20 mA	at 30 pF
3.0 ~ 80.0 MHz	28 mA	-	at 30 pF
3.0 ~ 130.0 MHz	28 mA	20 mA	at 15 pF
130.0 ~ 200.0 MHz	32 mA	-	at 15 pF

\* a ceramics capacitor of 100nF between pin #2 and pin #4 with short distance wiring is strongly recommended

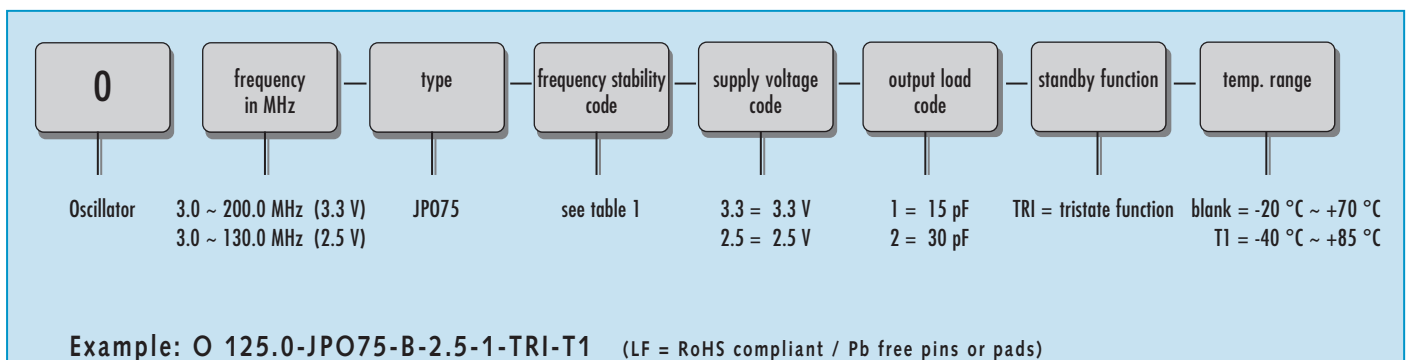
Table 3: Rise & fall time max.

6 ns:	3.0 ~ 70.0 MHz at 30 pF / 2.5 V	<b>note:</b> - specific data on request - rise time: 0.1 V <sub>DC</sub> ~ 0.9 V <sub>DC</sub> - fall time: 0.9 V <sub>DC</sub> ~ 0.1 V <sub>DC</sub>
5 ns:	3.0 ~ 80.0 MHz at 30 pF / 3.3 V	
4 ns:	3.0 ~ 100.0 MHz at 15 pF / 3.3 V & 2.5 V	
3 ns:	100.0 ~ 130.0 MHz at 15 pF / 2.5 V & 3.3 V	
2 ns:	130.0 ~ 200.0 MHz at 15 pF / 3.3 V	

### Dimensions

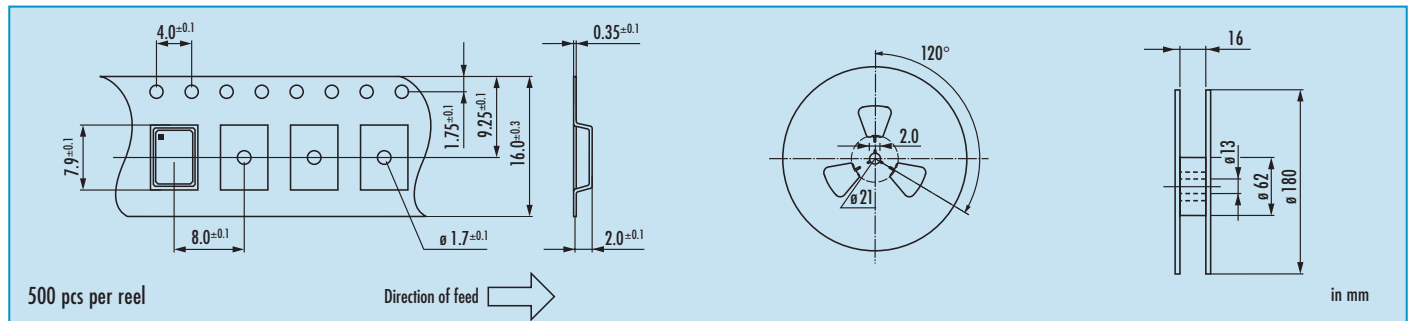


### Order Information

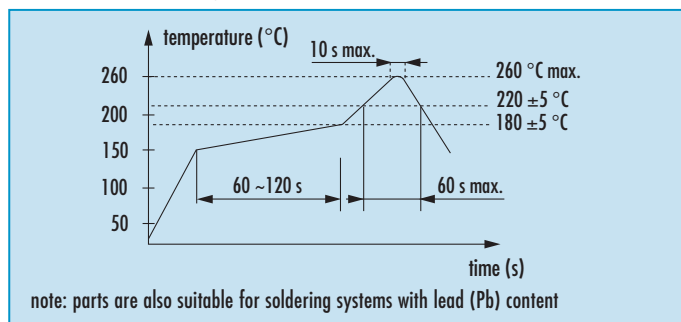


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## Taping specification



## Reflow Soldering Profile



## Marking (optional)

JPO / year / month / internal code

date code:  
A ~ M: Jan.- Dec.  
7: 2007  
8: 2008  
9: 2009

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

## Packing Note

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

## Enable / Disable Function

pin #1 (e/d control)	pin #3 (output)
open	active
high "1" ( $V_{IH} \geq 0.7 V_{DC}$ )	active
low "0" ( $V_{IL} \leq 0.3 V_{DC}$ )	high impedance
<b>tristate (TRI) function:</b>	
• oscillator active	
• output high impedance (weak pull up)	