



actual size

# Oscillator · PECL · JOE75 · 3.3 V

SMD Oscillator Low Voltage PECL · 7.5 x 5.2 mm

- drives fast PECL logic
- complementary output, low EMI
- reflow soldering temperature: 260 °C max.
- ceramic/metal package



## General Data

type	JOE75 3.3 V
frequency range	40.0 ~ 170.0 MHz
higher frequencies on request	170.0 ~ 270.0 MHz
frequency stability over all*	± 25ppm / ± 50ppm / ± 100ppm see table 1
current consumption	see table 2
supply voltage V <sub>DC</sub>	3.3 V ± 5%
temperature	operating: -10 °C ~ +70 °C / -40 °C ~ +85 °C storage: -55 °C ~ +125 °C
output	rise & fall time: 1ns (20% ~ 80% of V <sub>pp</sub> ) load nom.: 50Ω at 1.3 V low level max.: 1.7 V high level min.: 2.2 V
output enable time max.	10ms
output disable time max.	200ns
start-up time max.	10ms
standby function	stop
standby current max.	30μA
phase jitter 12 kHz ~ 20.0 MHz	< 1.0ps RMS
period jitter	< 5.0ps RMS
symmetry at 50% of V <sub>pp</sub>	45% ~ 55% max.

Table 1: Frequency Stability Code

stability code	A	B	C			
	± 100 ppm	± 50 ppm	± 25 ppm			
-10 °C ~ +70 °C	○	○	▲			
-40 °C ~ +85 °C	○	○				

● standard ○ available ▲ excludes shock & vibration

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

Table 2: Current Consumption max.

Current consumption at nominal load:	
40.0 ~ 170.0 MHz	60 mA
170.0 ~ 270.0 MHz	88 mA

## Enable / Disable Function

pin #1 (e/d control)	pin #4 / #5 (outputs)	
open or ≥ 0.7 V <sub>CC</sub>	enable	
gnd or ≤ 0.3 V <sub>CC</sub>	high impedance	

## Dimensions

top view      side view      bottom view      pad layout

pin connection  
 # 1: e/d  
 # 2: nc  
 # 3: ground  
 # 4: output 1  
 # 5: output 2  
 # 6: V<sub>CC</sub>

in mm

## Order Information

0	frequency in MHz	type	frequency stability code	supply voltage in Volt	option
Oscillator	40.0 ~ 170.0 MHz > 170 MHz on request	JOE75	see table 1	3.3 = 3.3 V	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 155.520-JOE75-B-3.3-T1-LF (Suffix LF = RoHS compliant / Pb free pins or pads)