



actual size

Oscillator · PECL · JOE75 · 2.5 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 2.5 V
frequency range	50.0 ~ 170.0 MHz
higher frequencies on request	170.0 – 270.0 MHz
frequency stability over all*	± 25 ppm / ± 50 ppm / ± 100 ppm see table 1
current consumption	88 mA max.
supply voltage V_{DC}	2.5 V ± 5%
temperature	operating: -10 °C ~ +70 °C / -40 °C ~ +85 °C storage: -55 °C ~ +125 °C
output	rise & fall time: 1 ns (20% ~ 80% of V_{pp}) load nom.: 50 Ω at 0.5 V low level max.: 1.195 V high level min.: 1.415 V
output enable time max.	10 ms
output disable time max.	200 ns
start-up time max.	10 ms
standby function	stop
standby current max.	30 µA
phase jitter 12 kHz ~ 20.0 MHz	< 1.0 ps RMS
period jitter	< 5.0 ps RMS
symmetry at 50% of V_{pp}	45% ~ 55% max.

Table 1: Frequency Stability Code

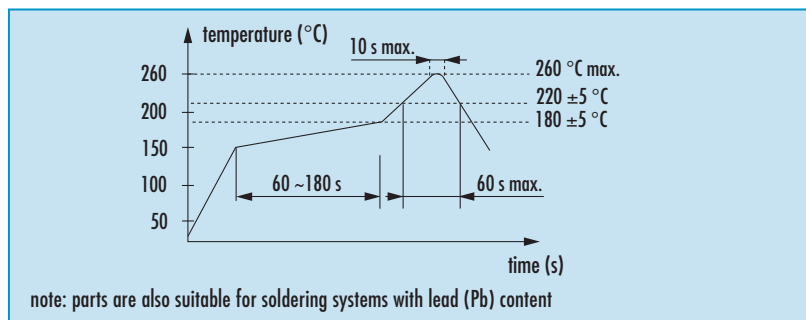
stability code	A	B	C			
	± 100 ppm	± 50 ppm	± 25 ppm			
-10 °C ~ +70 °C	○	○	▲			
-40 °C ~ +85 °C	○	○				
● standard ○ available ▲ excludes shock & vibration						

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

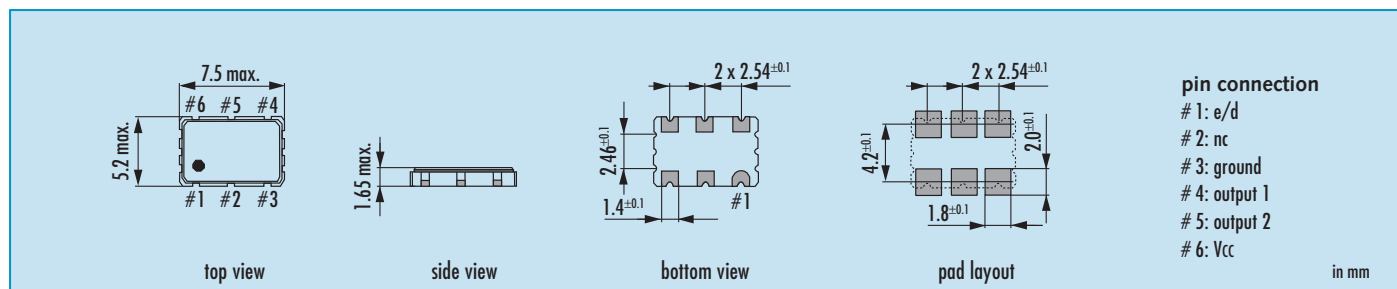
Enable / Disable Function

pin #1 (e/d control)	pin #4 / #5 (outputs)	
open or ≥ 0.7 V_{CC}	enable	
gnd or ≤ 0.3 V_{CC}	high impedance	

Reflow Soldering Profile



Dimensions



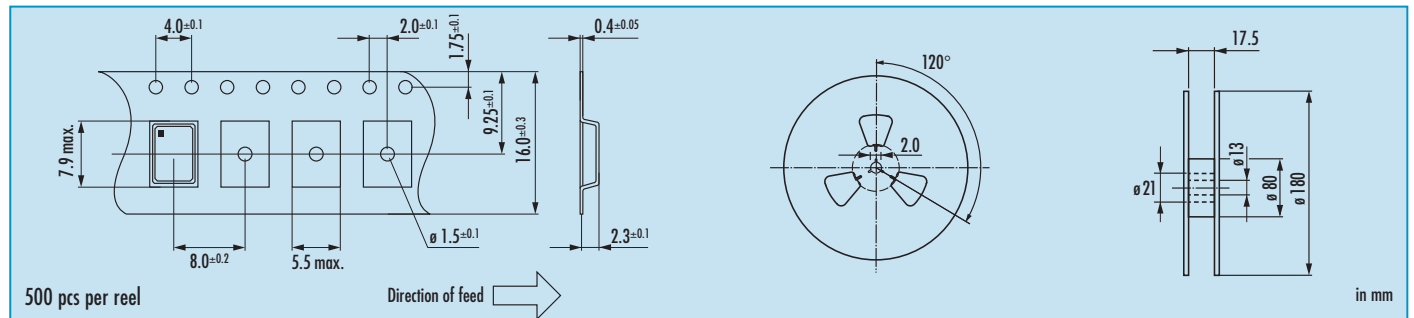
Order Information

0	frequency in MHz	—	type	—	frequency stability code	—	supply voltage in Volt	—	option
Oscillator	62.5 ~ 165.0 MHz		JOE75		see table 1		2.5 = 2.5 V		blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C on request
Example: O 155.520-JOE75-B-2.5-T1 (Suffix LF = RoHS compliant / Pb free pins or pads)									



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Taping Specification



Packing Note

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

Marking

type / frequency

company code / date code

date code:

A ~ M: Jan.- Dec.

9: 2009

0: 2010

1: 2011

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