



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_{DC}	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_{pp})
	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_{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.

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_{CC}	enable	
gnd or ≤ 0.3 V_{CC}	high impedance	

Dimensions

pin connection
 # 1: e/d
 # 2: nc
 # 3: ground
 # 4: output 1
 # 5: output 2
 # 6: V_{CC}

in mm

Order Information

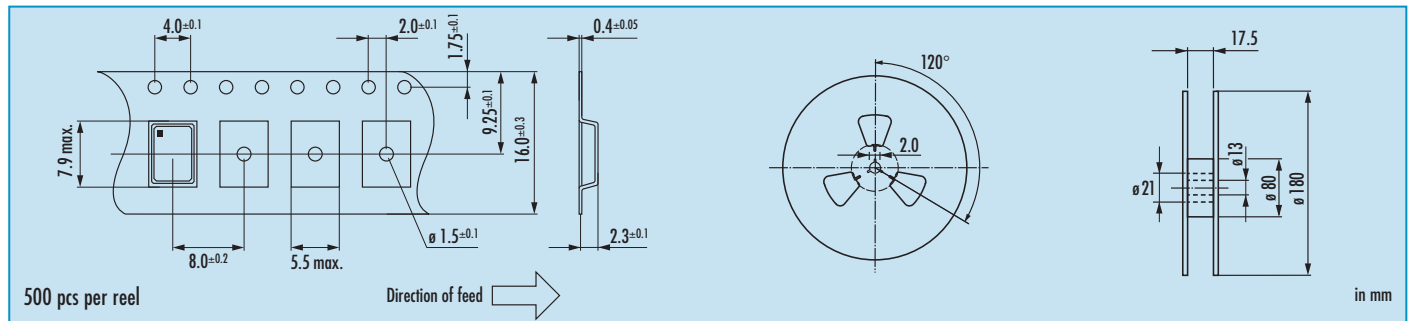
0	frequency in MHz	type	frequency stability code	supply voltage in Volt	option
Oscillator	40.0 ~ 170.0 MHz > 170 MHz on request	JOE75	see table 1	3.3 = 3.3 V	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

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



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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 / stability code / voltage code

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

Reflow Soldering Profile

