



actual size

# Oscillator · PECL · VCXO

SMD PECL VCXO · 7.5 x 5.2 mm

- uses quartz crystal at fundamental mode and PLL
- high pulling range  $\pm 150$  ppm
- complementary PECL output, low EMI
- ceramic/metal package



## General Data

type	JVE75B	
frequency range	12.0 ~ 800.0 MHz	
frequency stability over all*	$\pm 25$ ppm / $\pm 50$ ppm (see table 1)	
frequency pulling range min.	$\pm 150$ ppm	
pulling control voltage	$1.65 \text{ V} \pm 1.5 \text{ V}^{\text{a}}$	
pulling control input imp. min.	60 k $\Omega$	
current consumption	120mA max.	
supply voltage $V_{\text{DC}}$	$3.3 \text{ V} \pm 5\%$	
temperature	operating	$-10 \text{ }^{\circ}\text{C} \sim +70 \text{ }^{\circ}\text{C}$ / $-40 \text{ }^{\circ}\text{C} \sim +85 \text{ }^{\circ}\text{C}$
	storage	$-40 \text{ }^{\circ}\text{C} \sim +85 \text{ }^{\circ}\text{C}$
output	rise & fall time	1.0ns (20% ~ 80% of Vpp)*
	load nom.	50 $\Omega$ at 1.3 V
	low level max.	1.7 V
	high level min.	2.2 V
standby function	yes	
output enable time max.	10ms	
output disable time max.	50ns	
start-up time max.	10ms	
phase jitter 12 kHz ~ 20.0 MHz	< 5.0ps RMS	
Osymmetry at 50% of Vpp	45% ~ 55% typ. (40% $\pm$ 60% max.)	

\* 0.5ns, if >100.0 MHz

Table 1: Frequency Stability Code

stability code	B	C				
	$\pm 50$ ppm	$\pm 25$ ppm				
$-10 \text{ }^{\circ}\text{C} \sim +70 \text{ }^{\circ}\text{C}$	○	○				
$-40 \text{ }^{\circ}\text{C} \sim +85 \text{ }^{\circ}\text{C}$	○					

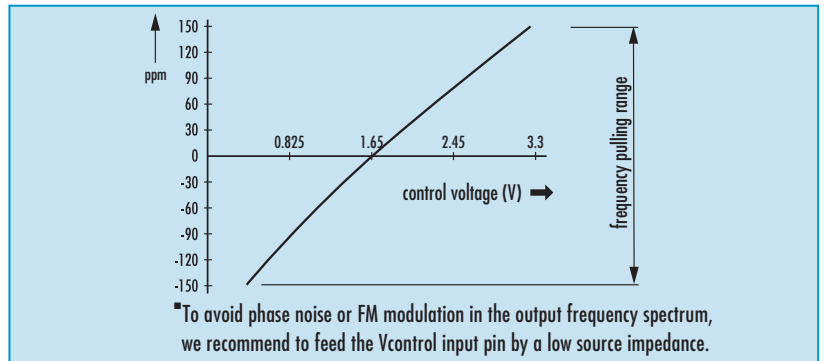
● standard ○ available

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

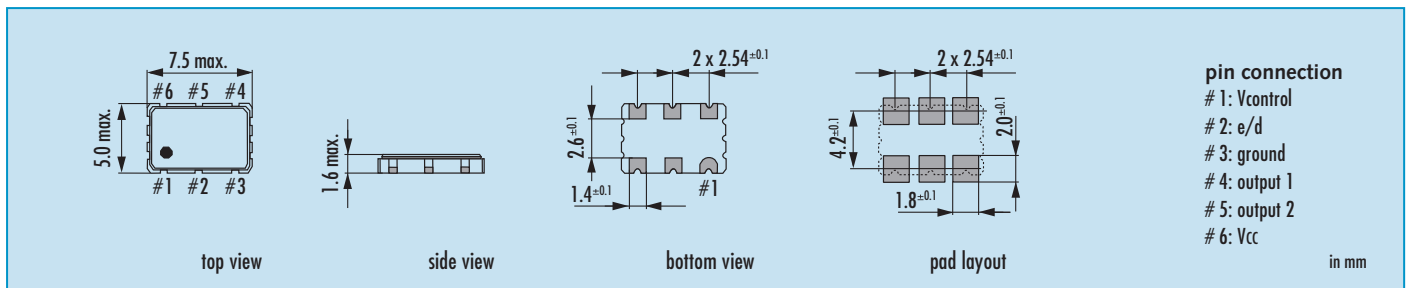
## Enable / Disable Function

pin #2 (e/d control)	pin #4 / #5 (outputs)	
open or $\geq 2.4 \text{ V}$	active	
gnd or $\leq 0.4 \text{ V}$	high impedance	

## Control Voltage Characteristic



## Dimensions



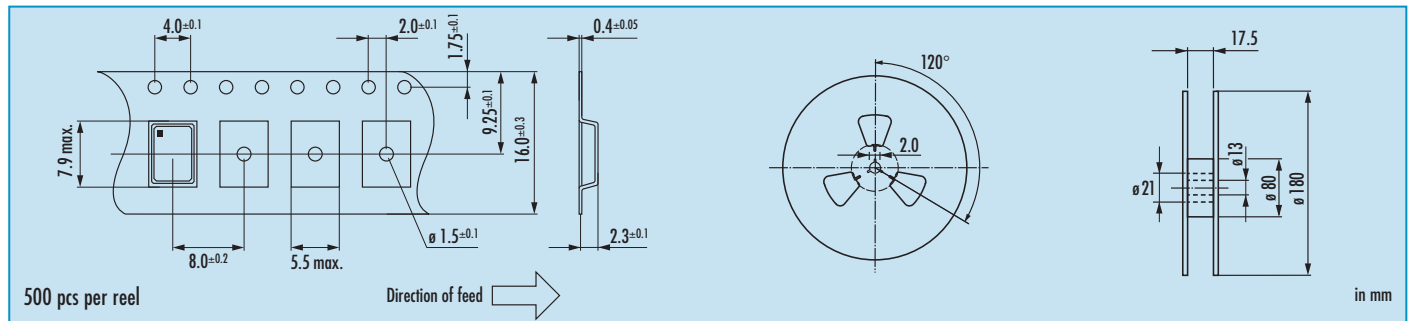
## Order Information

0	frequency	type	stability at 25 °C in ppm	supply voltage	pulling range in ppm	option
Oscillator	12.0 ~ 800.0 MHz	JVE75B	B = $\pm 50$ ppm C = $\pm 25$ ppm	3.3 = 3.3 V	15 = $\pm 150$ ppm	blank = $-10 \text{ }^{\circ}\text{C} \sim +70 \text{ }^{\circ}\text{C}$ T1 = $-40 \text{ }^{\circ}\text{C} \sim +85 \text{ }^{\circ}\text{C}$

Example: O 155.520-JVE75B-B-3.3-15-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 / 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

