



actual size

Oscillator · PECL · VCXO

SMD PECL VCXO · 7.5 x 5.2 mm

- uses quartz crystal in MESA technology
- low phase noise + jitter
- complementary PECL output, low EMI
- ceramic/metal package



General Data

type		JVE75A
frequency range		50.0 ~ 700.0 MHz
frequency stability over all*		± 25ppm / ± 50ppm (see table 1)
frequency pulling range min.		± 80ppm
pulling control voltage		1.65 V ± 1.5 V [■]
pulling control input imped. min.		60 kΩ
current consumption		120mA max.
supply voltage V _{DC}		3.3 V ± 5%
temperature	operating	-10 °C ~ +70 °C / -40 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	rise & fall time	0.5ns (20% ~ 80% of V _{pp})
	load nom.	50Ω 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		< 1.0ps RMS
symmetry at 50% of V _{pp}		45% ~ 55% typ. (40% ± 60% max.)

Table 1: Frequency Stability Code

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

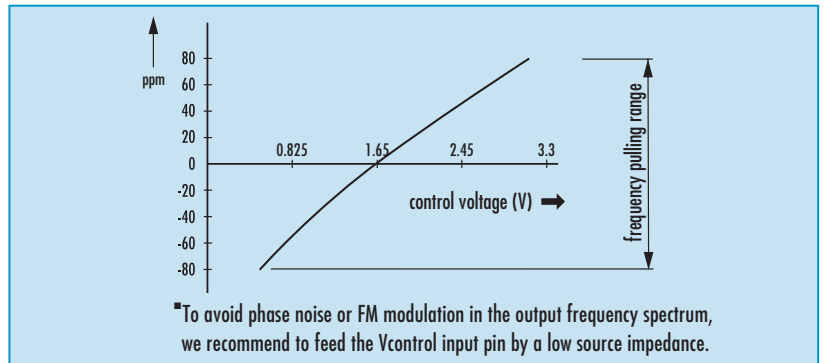
● standard ○ available

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

Enable / Disable Function

pin #2 (e/d control)	pin #4 / #5 (outputs)	
open or ≥ 2.4 V	active	
gnd or ≤ 0.4 V	high impedance	

Control Voltage Characteristic



Dimensions

pin connection

- # 1: V_{control}
- # 2: e/d
- # 3: ground
- # 4: output 1
- # 5: output 2
- # 6: V_{CC}

in mm

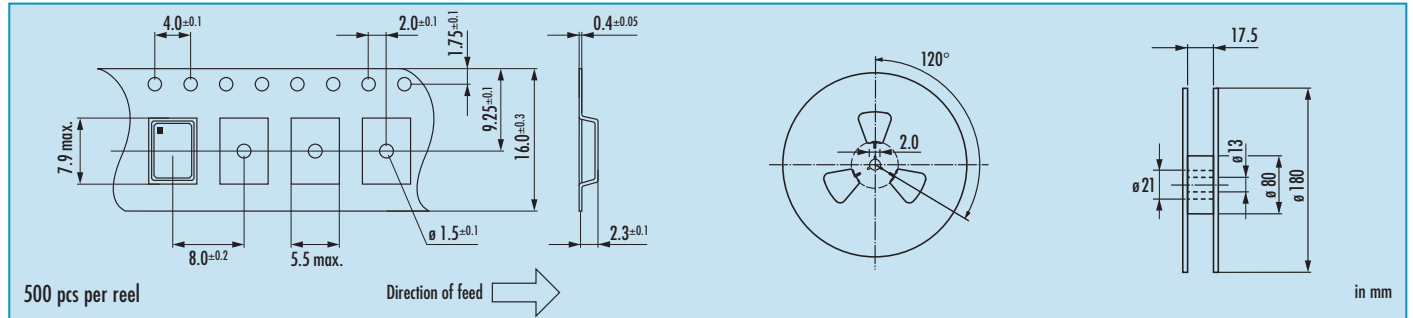
Order Information

0	frequency	type	stability at 25 °C in ppm	supply voltage	pulling range in ppm	option
Oscillator	50.0 ~ 700.0 MHz	JVE75A	B = ± 50 ppm C = ± 25 ppm	3.3 = 3.3 V	08 = ± 80 ppm	blank = -10 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: O 155.520-JVE75A-B-3.3-08 (Suffix LF = RoHS compliant / Pb free pins or pads)

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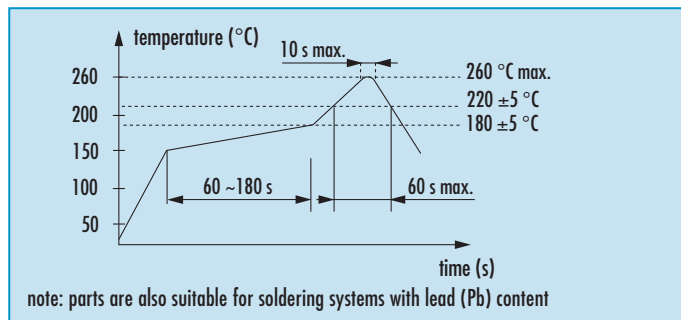
Taping Specification



Packing Note

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

Reflow Soldering Profile



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