



actual size

Oscillator · TCXO · JT53L

Temperature Compensated Crystal Oscillator

Features

■ RoHS compliant

■ VCTCXO or TCXO version

General Data

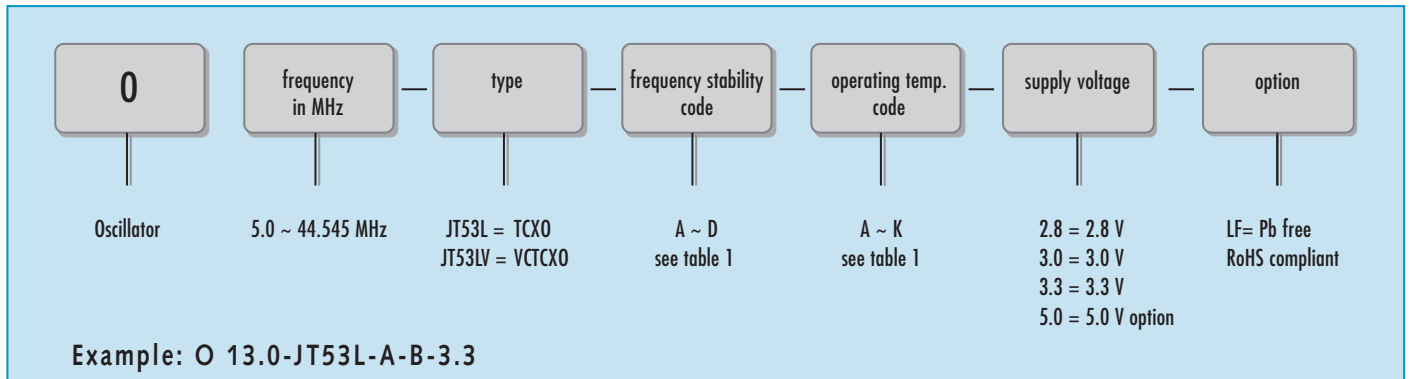
type	JT53L / JT53LV	
frequency in MHz	5.0 ~ 44.5450 MHz	
frequency stability	at 25 °C	± 0.5 ppm
	vs. temperature	see table 1
	aging first year	± 1.0 ppm
	supply voltage change	± 0.2 ppm ($V_{DC} \pm 5\%$)
load change	± 0.2 ppm	
current consumption max.	2.0 mA	
supply voltage	2.5 V / 2.8 V / 3.0 V / 3.3 V / 5.0 V	
output level	0.8 V _{p-p} min. (clipped sine wave)	
output load	10 kΩ // 10 pF	
external tuning range JT53LV	± 8 ppm min. ($V_{control}$: 1.5V ± 1.0V)	
operating temperature	see table 1	
storage temperature	-40 °C ~ +85 °C	
phase noise	-130 dBc / Hz at 1.0 kHz	

Table 1: frequency stability vs. temperature

temperature code	frequency stability code			
	A ± 2.5 ppm	B ± 2.0 ppm	C ± 1.5 ppm	D ± 1.0 ppm
A: -30 °C ~ +80 °C	●	○	○	○
B: -20 °C ~ +70 °C	●	○	○	○
C: -10 °C ~ +60 °C	●	○	○	○
D: 0 °C ~ +85 °C	●	○	○	○
E: 0 °C ~ +55 °C	●	○	○	○
F: -10 °C ~ +70 °C	●	○	○	○
G: -30 °C ~ +75 °C	●	○	○	○
H: -20 °C ~ +75 °C	●	○	○	○
K: -40 °C ~ +85 °C	○	○		

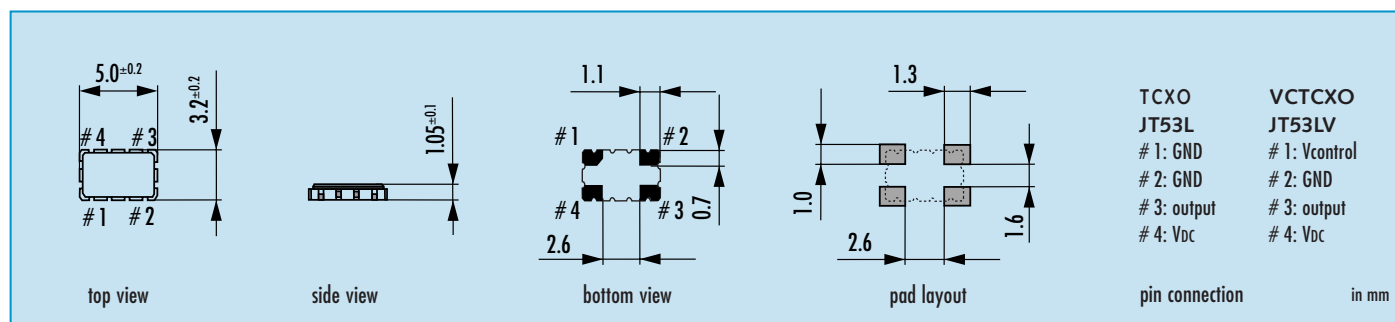
● standard ○ available

Order Information

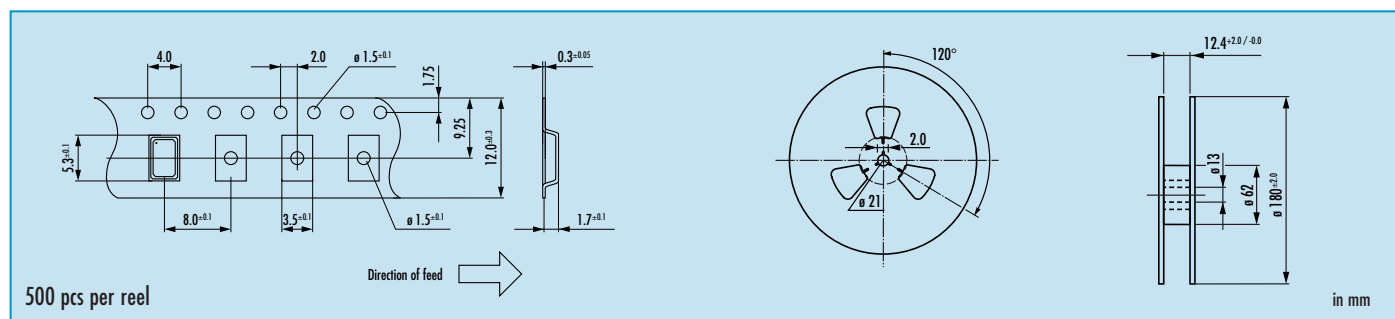


Oscillator · VCTCXO · JT53LV

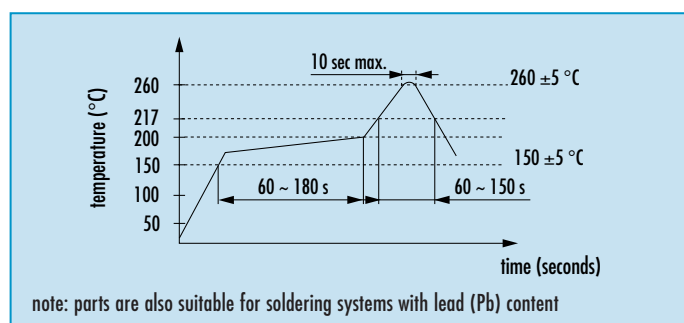
Dimensions



Taping Specification



Reflow Soldering Profile



Marking

frequency
company code / date code / internal code

	Jan.	Febr.	Mar.	Apr.	May	June	July	Aug.	Sept.	Okt.	Nov.	Dec.
2004	n	p	q	r	s	t	u	v	w	x	y	z
2005	A	B	C	D	E	F	G	H	J	K	L	M
2006	N	P	Q	R	S	T	U	V	W	X	Y	Z
2007	a	b	c	d	e	f	g	h	i	k	l	m

Packing Note

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

Note

- TCXO JT53L: pin #1 connected to ground
- VCTCXO JT53LV: pin #1 connected to control voltage