



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





actual size

Oscillator JT22S(V) · (VC)TCXO

- Temp. Compensated Crystal Oscillator, 2.5 x 2.0 mm
- low power VCTCXO or TCXO
- temperature range -40 °C ~ +85 °C available
- ± 1.0 ppm stability available
- ceramic/metal package



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

GENERAL DATA

TYPE		JT22S / JT22SV
frequency range		9.5 ~ 52.0 MHz
frequency tolerance/ stability	at +25°C	± 1.5 ppm (incl. 2x reflow)
	temperature	± 1 ppm ~ ± 5 ppm (table 1)
	aging first year	± 1 ppm
	supply voltage	± 0.2 ppm (at $V_{DC} \pm 5\%$)
	load change	± 0.2 ppm
current consumption		1.5 mA max. < 26 MHz / 2.5 mA max. < 52 MHz
supply voltage V_{DC}		1.8 / 2.5 / 2.8 / 3.0 / 3.3 (± 5%) *
temperature	operating	see table 1
	storage	-40 °C ~ +85 °C
output	load nom.	10 K Ω // 10 pF
	level min.	0.8 Vpp (clipped sine)
external tuning range JT22SV		± 8 ppm min.
external tuning voltage JT22SV		0.9 V ± 0.9 V at $V_{DC} = 1.8$ V (standard)
		1.5 V ± 1.0 V at $V_{DC} \geq 2.5$ V (standard)
		1.4 V ± 1.0 V at $V_{DC} \geq 2.5$ V (option)
start-up time max.		2.5 ms
phase noise	at 100 Hz	-109 dBc/Hz typ.
	at f_0	at 1 KHz
26 MHz	at 10 KHz	-148 dBc/Hz typ.

TABLE 1: FREQUENCY STABILITY VS. TEMPERATURE

operating temperature code	frequency stability code / ppm					
	Y	Z	A	B	C	D
A: -30 °C ~ +80 °C	± 5.0	± 3.0	± 2.5	± 2.0	± 1.5	± 1.0
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	○	○	○	○	○	○
L: -20 °C ~ +85 °C	○	○	○	○	○	○
M: -30 °C ~ +85 °C	○	○	○	○	○	○

○ on request

NOTE

- TCXO JT22S: pin #1 connected to GND
- VCTCXO JT22SV: pin #1 is control voltage V_C
- external AC coupling for output recommended
- * other nominal supply voltages within 1.8 V ~ 3.3 V need to be specified, ask for availability

DIMENSIONS

top view

side view

bottom view

pad layout

TCXO JT22S	VCTCXO JT22SV
# 1: GND	# 1: Vcontrol
# 2: GND	# 2: GND
# 3: output	# 3: output
# 4: V_{DC}	# 4: V_{DC}

pin connection

in mm

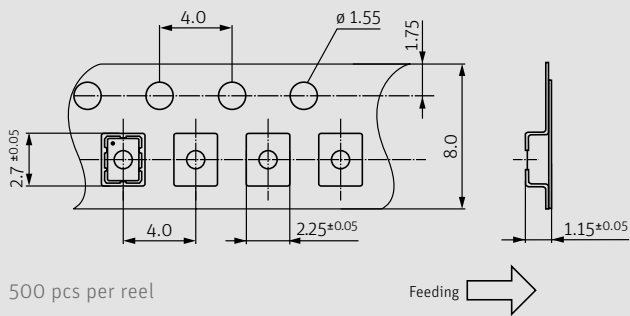
ORDER INFORMATION

0	frequency	type	frequency stability code	operating temp. code	supply voltage	control voltage (for JT22SV only)
Oscillator	9.5 ~ 52.0 MHz	JT22S = TCXO JT22SV = VCTCXO	A - Z see table 1	A - M see table 1	1.8 = 1.8 V 2.5 = 2.5 V 2.8 = 2.8 V 3.0 = 3.0 V 3.3 = 3.3 V	0.9 = V_C 0.9 V ± 0.9 V at $V_{DC} = 1.8$ V 1.5 = V_C 1.5 V ± 1.0 V at $V_{DC} \geq 2.5$ V 1.4 = V_C 1.4 V ± 1.0 V at $V_{DC} \geq 2.5$ V see General Data

Example: 0 26.0-JT22SV-A-G-3.3-1.5-LF (Suffix LF = RoHS compliant / Pb free)

Oscillator JT22S(V) · (VC)TCXO

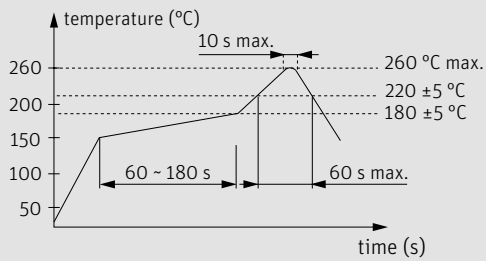
TAPING SPECIFICATION



500 pcs per reel

in mm

REFLOW SOLDERING PROFILE



note: parts are also suitable for soldering systems with lead (Pb) content

MARKING

frequency

company code / stability code / data code

date code: A ~ M: Jan. - Dec.

7: 2017 8: 2018 9: 2019 0: 2020 1: 2021 2: 2022

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

PACKAGING NOTE

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