actual size

Oscillator JT11S(V) · (VC)TCXO

- temp. compensated crystal oscillator, 1.6 x 1.2 mm
- 1.8V ~ 3.3V low voltage TCXO with clipped sine output
- ± 0.5 ppm stability up to -40 °C ~ +85 °C available
- for navigation system use, please prefer JT11G
- for lower supply voltages 1.2 V ~ 1.8 V refer to JT11LE

RoHS compliant · Pb free · REACH compliant · Conflict mineral free

GENERAL DATA

TYPE		JT11S / JT11SV clipped sine (VC)TCXO
standard frequencies		19.20 / 26.0 / 38.40 / 52.0 MHz
frequency tolerance/ stability	at +25°C	±2.0 ppm (incl. 2x reflow)
	temperature	±0.5 ppm ~ ±5 ppm (table 1)
	aging first year	±1 ppm
	supply voltage	±0.2 ppm (at any V_{DC} ±5 %)
	load change	±0.2 ppm (at 10 KΩ || 10 pF ±10 %)
current consumption		2.0 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 KΩ // 10 pF
	level min.	0.8 Vpp (clipped sine)
external tuning range JT21SV		±8 ppm min.
external tuning voltage JT21SV		0.9 V ± 0.9 V at V_{DC} = 1.8 V (standard)
		1.5 V ± 1.0 V at V_{DC} ≥ 2.5 V (standard)
		1.4 V ± 1.0 V at V_{DC} ≥ 2.5 V (option)
start-up time max.		2.5 ms
phase noise at fo 26 MHz	at 100 Hz	-117 dBc/Hz typ.
	at 1 KHz	-137 dBc/Hz typ.
	at 10 KHz	-149 dBc/Hz typ.

TABLE 1: FREQUENCY STABILITY VS. TEMPERATURE

operating temperature code	frequency stability code / ppm						
	Y	Z	A	B	C	D	E
	± 5.0	± 3.0	± 2.5	± 2.0	± 1.5	± 1.0	± 0.5
B: -20 °C ~ +70 °C	O	O	O	O	O	O	O
G: -30 °C ~ +75 °C	O	O	O	O	O	O	O
M: -30 °C ~ +85 °C	O	O	O	O	O	O	O
K: -40 °C ~ +85 °C	O	O	O	O	O	O	O

O on request

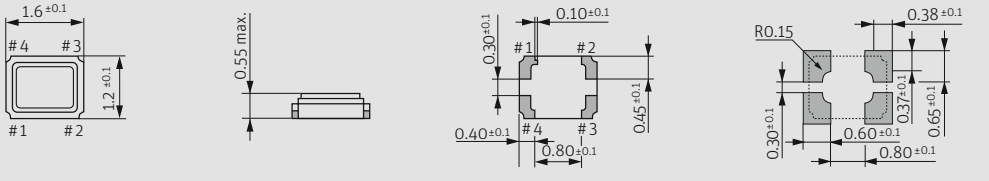
NOTE

- TCXO JT11S: pin #1 connected to GND
- VCTCXO JT11SV: pin #1 is control voltage VC
- external AC coupling for output recommended
- for best supply noise rejection, connect a capacitor closely to the supply voltage pins
- for lower supply voltages 1.2 V ~ 1.8 V refer to JT11LE
- standard frequencies are 19.20 / 26.0 / 38.40 and 52.0MHz Please contact Jauch to ask for other frequencies

PACKAGING NOTE

– standard packing unit is 3000 pieces per reel
– customized quantities on request

DIMENSIONS



TCXO	VCTCXO
JT11S	JT11SV
#1: GND	#1: Vcontrol
#2: GND	#2: GND
#3: output	#3: output
#4: V_{DC}	#4: V_{DC}

top view · side view · bottom view · pad layout · pin connection · in mm

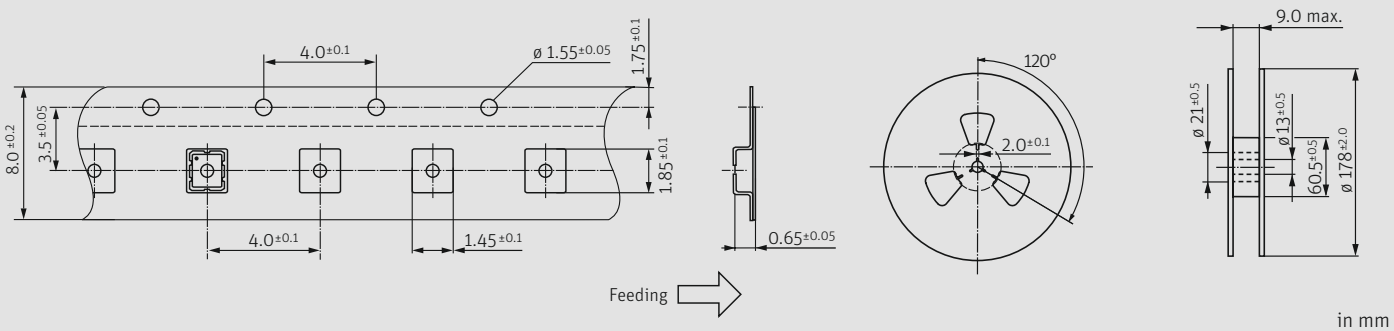
ORDER INFORMATION

0	standard frequencies	–	type	–	frequency stability code	–	operating temp. code	–	supply voltage	–	control voltage (for JT11SV only)
Oscillator	19.20 MHz / 26.0 MHz 38.40 MHz / 52.0 MHz		JT11S = TCXO JT11SV = 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 = VC 0.9 V ± 0.9 V at VDC = 1.8 V 1.5 = VC 1.5 V ± 1.0 V at VDC ≥ 2.5 V 1.4 = VC 1.4 V ± 1.0 V at VDC ≥ 2.5 V see General Data

Example: O 26.0-JT11SV-A-G-3.3-1.5-LF (Suffix LF = RoHS compliant / Pb free)

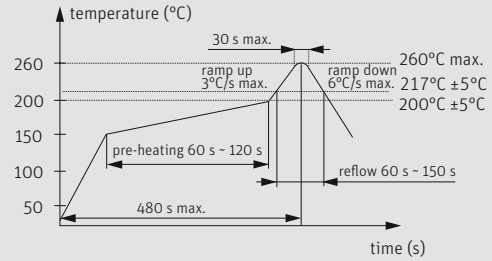
Oscillator JT11S(V) · (VC)TCXO

TAPING SPECIFICATION



in mm

REFLOW SOLDERING PROFILE



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

MARKING

frequency
company code / stability code / date code

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

4: 2024 5: 2025 6: 2026 7: 2027 8: 2028 9: 2029

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

Jauch Quartz GmbH • e-mail: info@jauch.com • full data can be found under: www.jauch.com