



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 V _{pp} (clipped sine)
external tuning range JT11SV		±8 ppm min.
external tuning voltage JT11SV		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 f _o 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
B: -20 °C ~ +70 °C	○	○	○	○	○	○	○
G: -30 °C ~ +75 °C	○	○	○	○	○	○	○
M: -30 °C ~ +85 °C	○	○	○	○	○	○	○
K: -40 °C ~ +85 °C	○	○	○	○	○	○	○

○ on request

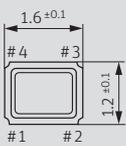
NOTE

- 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

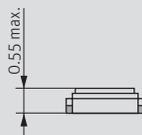
PACKAGING NOTE

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

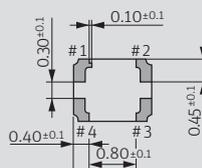
DIMENSIONS



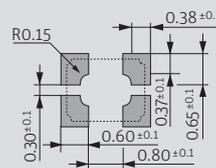
top view



side view



bottom view



pad layout

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

pin connection

in mm

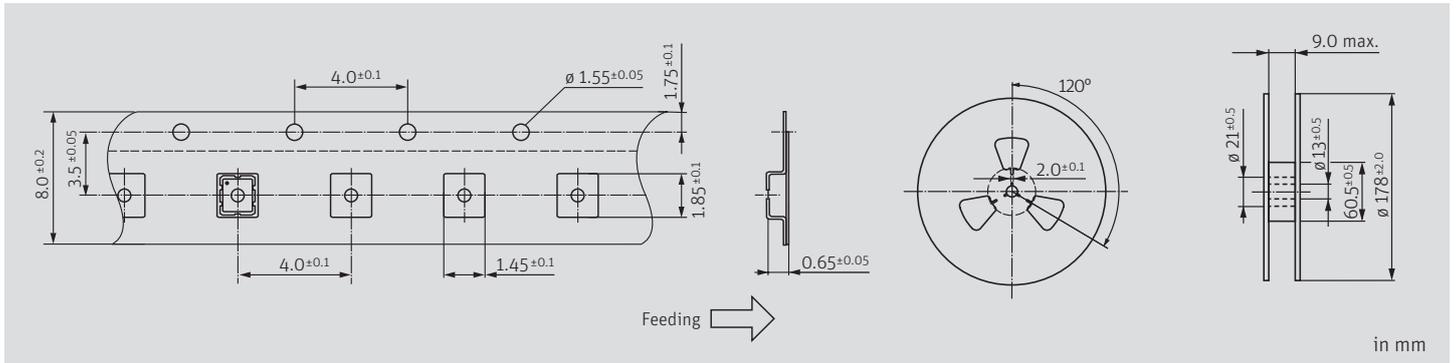
ORDER INFORMATION

0	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 V _{DC} = 1.8 V 1.5 = VC 1.5 V ± 1.0 V at V _{DC} ≥ 2.5 V 1.4 = VC 1.4 V ± 1.0 V at V _{DC} ≥ 2.5 V see General Data

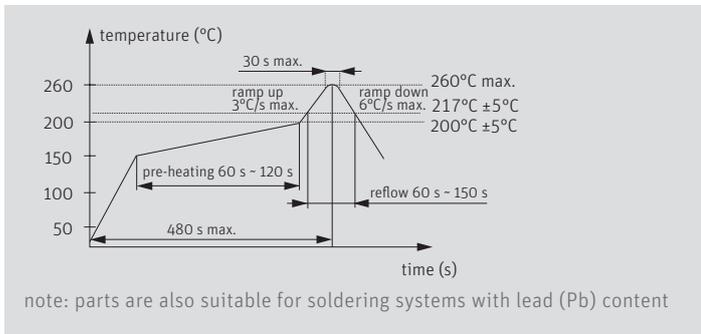
Example: 0 26.0-JT11SV-A-G-3.3-1.5-LF (Suffix LF = RoHS compliant / Pb free)

Oscillator JT11S(V) · (VC)TCXO

TAPING SPECIFICATION



REFLOW SOLDERING PROFILE



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