



actual size

# Oscillator JT11GLE · GPS TCXO

- temp. compensated crystal Oscillator, 1.6 x 1.2 mm
- special type for navigation systems (GPS etc.)
- low voltage 1.2 V ~ 1.8 V, with clipped sine output
- high stability  $\pm 0.5$  ppm, temperature range up to  $-40$  °C ~  $+85$  °C
- with enable / disable function



RoHS compliant



Pb free



REACH compliant



Conflict mineral free

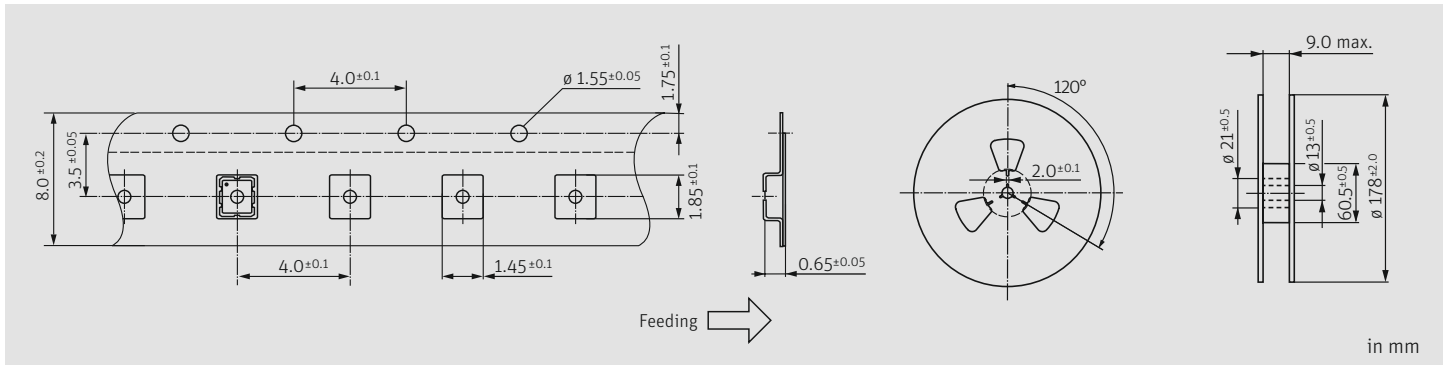
GENERAL DATA		ENABLE / DISABLE FUNCTION	
<b>TYPE</b>	<b>JT11GLE TCXO with E/D</b>	<b>PIN #1 (E/D CONTROL)</b>	<b>PIN #3 (OUTPUT)</b>
frequency range	26.0 / 52.0 MHz (other frequ. case by case)	high "1" ( $V_{IH} \geq 0.8 V_{DC}$ )	active (see information below)
frequency tolerance/ stability	at +25°C	low "0" ( $V_{IL} \leq 0.2 V_{DC}$ )	high impedance
	temperature	stop function of JT11GLE:	
	aging first year	- oscillator stops	
	supply voltage	- output high impedance	
	load change	- disabled supply current: 1µA max.	
current consumption max.	1.5 mA at 26.0 MHz / 2.5 mA at 52.0 MHz	important: to activate the JT11GLE TCXO permanently, please connect an external pull-up resistor of 10 kOhm to pin #1	
supply voltage $V_{DC}$	1.2 V -5 % ~ 1.8 V +5 % (variable)	<b>NOTE</b>	
temperature	operating	- JT11GLE: pin #1 is enable/disable, external pull-up resistor required	
	storage	- for navigation applications at higher supply voltages 1.8 V / 2.5 V / 3.3 V please refer to JT11G	
output	load nom.	- for standard applications at low supply voltages 1.2 V ~ 1.8 V please refer to JT11LE	
	level min.	- external AC coupling for output recommended	
temperature slope max.	0.1 ppm / °C (at max. temp step 2 °C)	- for best supply noise rejection, connect a capacitor closely to the supply voltage pins	
static frequency hysteresis	0.6 ppm max. (* see note)	- a separate voltage supply rail ensures best phase noise	
start-up time max.	3.0 ms	* maximal difference at +25°C, measured before and after a full cold-hot-cold cycle	
enable time max.	3.0 ms	<b>PACKAGING NOTE</b>	
disable time max.	150 ns	- standard packing unit is 3000 pieces per reel	
phase noise at $f_0$ 26 MHz	at 100 Hz	- customized quantities on request	
	at 1 KHz		
	at 10 KHz		

DIMENSIONS					
				TCXO with e/d JT11GLE	
top view	side view	bottom view	pad layout	pin connection	in mm
				# 1: e/d	
				# 2: GND	
				# 3: output	
				# 4: $V_{DC}$	

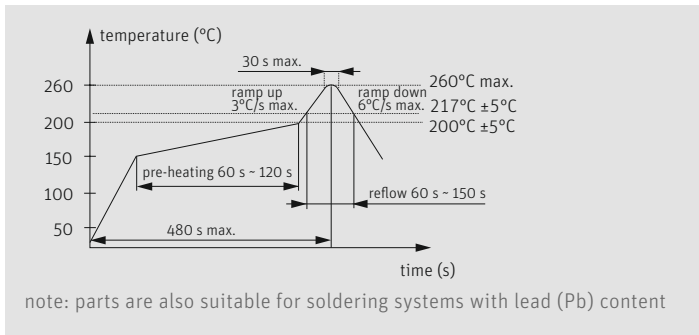
ORDER INFORMATION						
<b>0</b>	frequency	type	frequency stability code	operating temp. code	supply voltage	
Oscillator	26.0 = 26.0 MHz 52.0 = 52.0 MHz	JT11GLE	E = $\pm 0.5$ ppm	M = $-30$ °C ~ $+85$ °C K = $-40$ °C ~ $+85$ °C	V = variable supply voltage 1.2 V -5 % ~ 1.8 V +5 %	
<b>Example: 0 26.0-JT11GLE-E-M-V-LF</b> (Suffix LF = RoHS compliant / Pb free)						

# Oscillator JT11GLE · TCXO for GPS

## 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