

actual size

Oscillator · TCXO · JT22G

Temp. Compensated Crystal Oscillator · 2.5 x 2.0 mm

- high stability TCXO for GPS applications
- temperature range -30 °C ~ +85 °C
- reflow soldering temperature: 260 °C max.
- ceramic/metal package

RoHS 2002/95/EC
RoHS compliant

Pb free: pins / pads

General Data

type		JT22G
frequency range		16.368 ~ 27.456 MHz
frequency stability	at +25 °C	± 1.5 ppm*
	temperature	± 0.5 ppm
	aging first year	± 1ppm
	supply voltage	± 0.2ppm (at V_{DC} ± 5%)
	load change	± 0.2ppm
current consumption max.		2.0 mA max.
supply voltage V_{DC}		1.8 / 2.8 / 3.0 / 3.3 (± 5%)
temperature	operating	-30 °C ~ +85 °C
	storage	-40 °C ~ +85 °C
output	load nom.	10KΩ // 10pF
	level min.	0.8Vpp (clipped sine)
start-up time max.		2.5 ms

* frequency tolerance after double reflow

Table 1:

nominal frequencies							Unit
16.368	16.369	19.2	23.104	24.5535	26.0	27.456	MHz

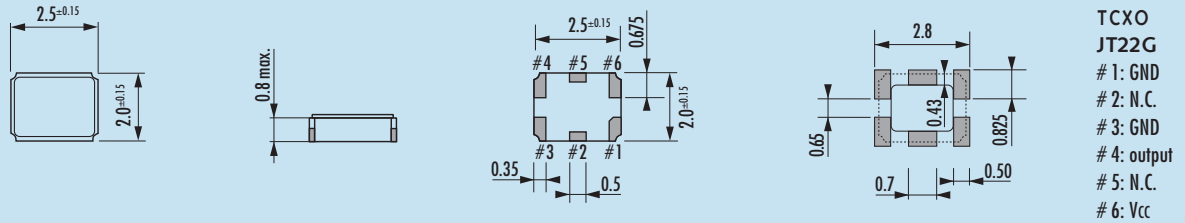
Table 2: Phase Noise

offset →	@ 10 Hz	@ 100 Hz	@ 1 kHz	@ 10 kHz	Unit
16.3 ~ 24.5 MHz	-85	-102	-133	-148	dBc/Hz
26.0 ~ 27.4 MHz	-70	-105	-130	-145	dBc/Hz

Note

- external AC coupling for output recommended

Dimensions



top view | side view | bottom view | pad layout

TCXO
JT22G
1: GND
2: N.C.
3: GND
4: output
5: N.C.
6: Vcc

pin connection

in mm

Order Information

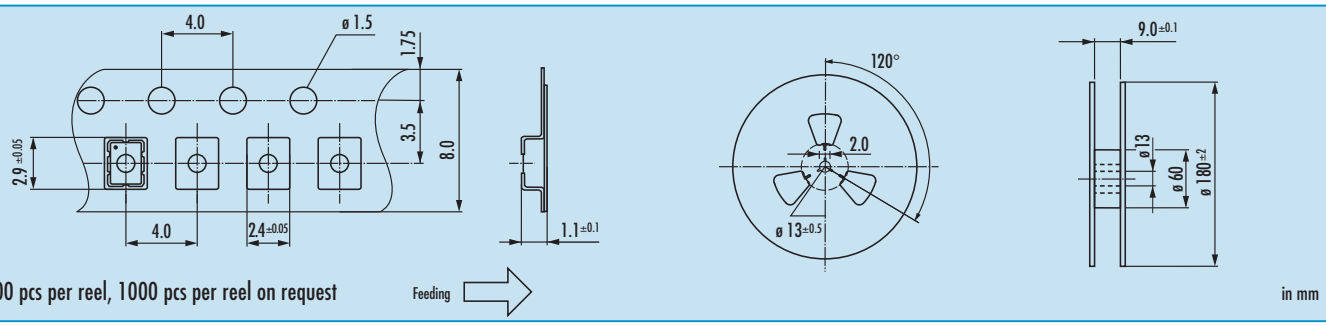
0	frequency in MHz	—	type	—	frequency stability code	—	operating temp. code	—	supply voltage
Oscillator	16.368 ~ 27.456 MHz		JT22G = TCXO		E = ± 0.5 ppm		M = -30 °C ~ +85 °C		1.8 = 1.8 V 2.8 = 2.8 V 3.0 = 3.0 V 3.3 = 3.3 V

Example: O 16.3680-JT22G-E-M-3.3-LF (Suffix LF = RoHS compliant / Pb free pads)

Jauch Quartz GmbH • e-mail: info@jauch.de
full data can be found under: www.jauch.de / www.jauch.fr / www.jauchusa.com
All specifications are subject to change without notice

Oscillator · TCXO · JT22G

Taping Specification

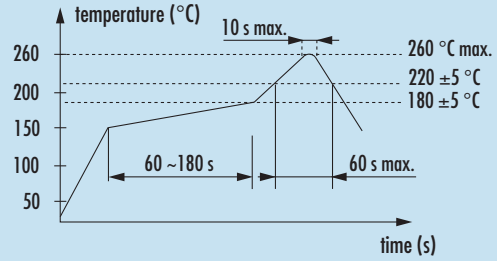


3000 pcs per reel, 1000 pcs per reel on request

Feeding

in mm

Reflow Soldering Profile



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

Marking

lot no.

company code / frequency / date code (YM)

date code:

A ~ M: Jan.- Dec.

9: 2009

0: 2010

1: 2011

Jan.	Febr.	Mar.	Apr.	May	June
A	B	C	D	E	F

July	Aug.	Sept.	Oct.	Nov.	Dec.
G	H	J	K	L	M

Packing Note

- standard packing units are 3000 pieces per reel
- non-multiple packing units are only supplied taped / bulk

All specifications are subject to change without notice