

actual size

Quartz Crystal · MTF32

Tuning Fork Crystal · 3.0 x 8.0 mm

- 3 x 8 mm cylinder type
- 32.768 kHz standard

RoHS 2002/95/EC

Pb free: pins and pads

General Data

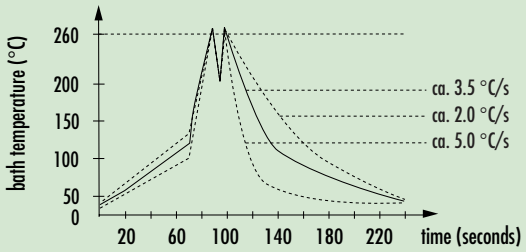
type	MTF32
frequency	32.768 kHz (15.0 ~ 150.0 kHz on request)
frequency tolerance at 25 °C ± 5 °C	± 10 ppm / ± 20 ppm
load capacitance C_L	10 pF / 12.5 pF (6 pF ~ 12.5 pF)
temperature constant	$-0.04 \cdot 10^{-6} / °C^2$ max. $-0.034 \cdot 10^{-6} / °C^2$ typical
frequency temperature characteristic	$f (ppm) = -0.04 (25 °C - T)^2$ T = requested temperature
operating tenperature range	-20 °C ~ +70 °C / -40 °C ~ +85 °C
shunt capacitance C_0	1.7 pF typical
series resistance max. (ESR)	30.0 kΩ
storage temperature	-40 °C ~ +90 °C
drive level max.	1 µW
aging first year	< ± 5 ppm

Frequency Stability vs. Temperature

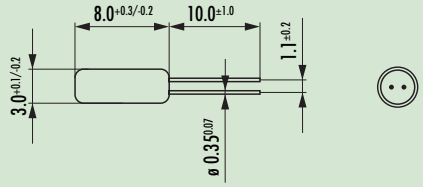
		- 80 ppm	- 160 ppm	
-20 °C ~ +70 °C	STD.	●		
-40 °C ~ +85 °C	T1		●	

● standard

Wave Soldering Profile



Dimensions



in mm

Marking

Date code (month / year)

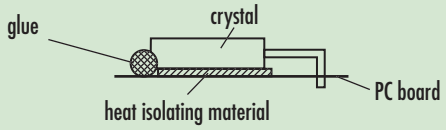
date code:
A ~ M: Jan.- Dec.
5: 2005
6: 2006
7: 2007

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

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

Mounting

Mounting: if the crystal should be mounted vertically to your board (see picture), do not directly solder the metal can. The crystal may be overheated by the direct heat flow.
Please use glue (hot-melt adhesive) or mechanical clamping to fasten the metal can.



Order Information

Q	frequency	—	type	—	load capacitance	—	stability at 25 °C	—	option
Quartz	0.032768 MHz		MTF32		6 pF ~ 12.5 pF 10.0 pF Std. 12.5 pF Std.		20 = ± 20 ppm 10 = ± 10 ppm		blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C

Example: Q 0.032768-MTF32-12.5-30 (Suffix LF = RoHS compliant / Pb free pads)

Jauch Quartz GmbH • e-mail: info@jauch.de
Internet: www.jauch.de / www.jauch.fr / www.jauchusa.com
All specifications are subject to change without notice