

actual size

# Quartz Crystal · HC532M4

4 Pad Version · 5.0 x 3.2 mm

- seam sealed ceramic/metal package
- extended temperature ranges available
- high mechanical reliability type available
- for automotive type, see automotive datasheet



## General Data

type	HC532M4	
frequency range	8.0 ~ 56.0 MHz	(fund. AT-cut)
	50.0 ~ 125.0 MHz	(3rd OT AT-cut)
frequency tolerance at 25 °C	± 10 ppm / ± 30 ppm / ± 50 ppm	
load capacitance $C_L$	12 pF	standard (option 8 pF ~ 32 pF / series)
shunt capacitance $C_0$	< 7 pF	
storage temperature	-40 °C ~ +125 °C	
drive level max.	100 uW (others recommended)	
aging	± 3 ppm max first year	

## ESR (series resistance Rs)

frequency in MHz	vibration mode	ESR max. in $\Omega$	ESR typ. in $\Omega$
8.0 ~ 9.999	fund. - AT	100	50
10.0 ~ 10.999	fund. - AT	50	30
11.0 ~ 11.999	fund. - AT	40	25
12.0 ~ 21.999	fund. - AT	40	20
22.0 ~ 24.999	fund. - AT	40	15
25.0 ~ 49.999	fund. - AT	30	15
50.0 ~ 56.000	fund. - AT	40	20
50.0 ~ 79.999	3rd OT - AT	100	60
80.0 ~ 125.000	3rd OT - AT	80	60

## Frequency Stability vs. Temperature

		± 10 ppm	± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm	± 100 ppm
-20 °C ~ +70 °C	STD.	○	○	○	○	○	○
-40 °C ~ +85 °C	T1		○	○	○	○	○
-40 °C ~ +105 °C	T2					○	○
-40 °C ~ +125 °C	T3						○

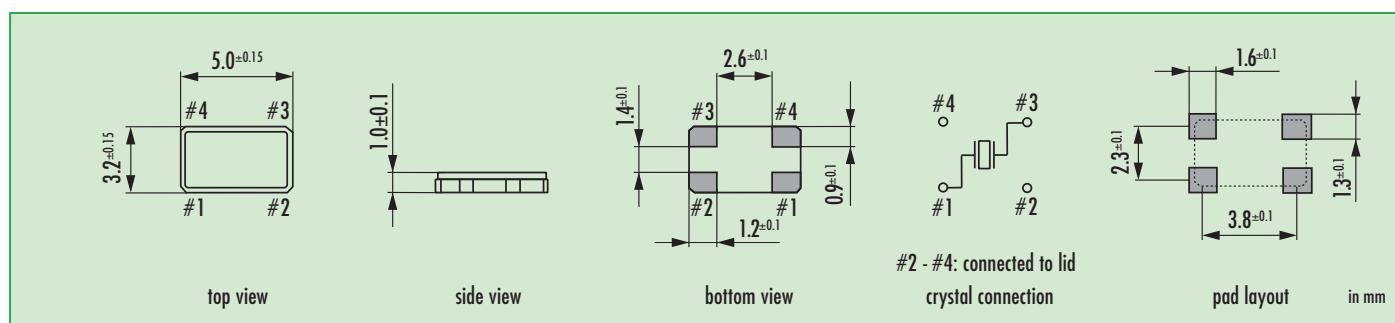
○ available

## Marking

frequency with load capacitance code  
company code / date code / internal code

	Jan.	Febr.	Mar.	Apr.	May	June	July	Aug.	Sept.	Okt.	Nov.	Dec.
2011 2015	a	b	c	d	e	f	g	h	i	k	l	m
2012 2016	n	p	q	r	s	t	u	v	w	x	y	z
2013 2017	A	B	C	D	E	F	G	H	J	K	L	M
2014 2018	N	P	Q	R	S	T	U	V	W	X	Y	Z

## Dimensions



## Taping Specification

