



actual size

SMD Quartz Crystal · MG3A

4 Pad Version · 13.1 x 5.0 mm

- automotive temperature range available
- reflow soldering temperature: 260 °C max.
- suitable for automotive applications



General Data

type	MG3A	
frequency range	3.50 ~ 40.0 MHz	(fund. AT-cut)
	30.0 ~ 48.0 MHz	(3rd OT. AT-cut; ask, if higher frequencies are available)
frequency tolerance at 25 °C	± 15 ppm ~ ± 50 ppm	
load capacitance C_L	12 pF ~ 32 pF or series	
shunt capacitance C_0	< 5 pF	
storage temperature	-40 °C ~ +90 °C	
drive level max.	100uw (others recommended)	
aging	± 5 ppm max first year	

ESR (series resistance R_s)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
3.50 ~ 3.6999	fund.- AT	180	80
3.70 ~ 4.0999	fund.- AT	150	60
4.10 ~ 5.9999	fund.- AT	120	40
6.00 ~ 9.9999	fund.- AT	70	30
10.0 ~ 13.999	fund.- AT	50	20
14.0 ~ 40.000	fund.- AT	40	15
30.0 ~ 48.000	3rd OT- AT	100	80

Frequency Stability vs. Temperature

		± 20 ppm	± 30 ppm	± 50 ppm	± 100 ppm	± 150 ppm	+10/-100 ppm
-10 °C ~ +60 °C	T1	D	○	●			○ BT-cut
-20 °C ~ +70 °C	STD	D	○	●			
-40 °C ~ +85 °C	T2		○	○	●		
-40 °C ~ +105 °C	T3			○	○		
-40 °C ~ +125 °C	T4					○	

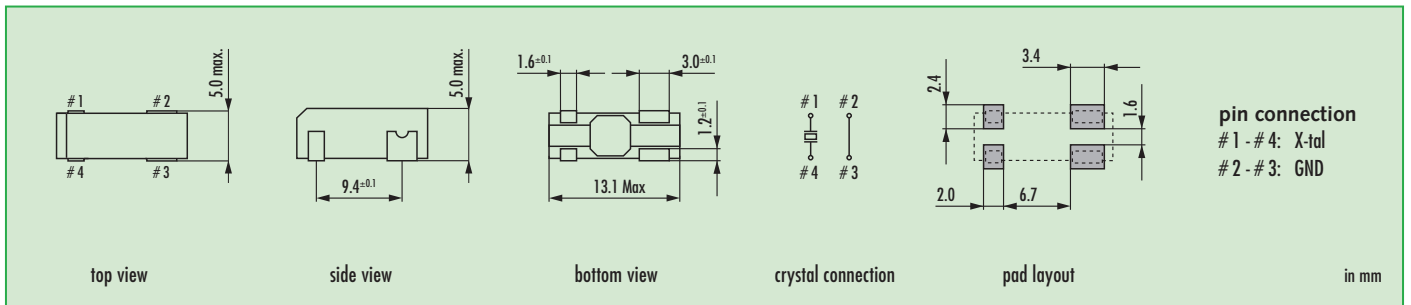
● standard ○ available D ask, if available

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

