



actual size

JAS32P4 · AEC-Q200

4 Pad Version · 3.2 x 2.5 mm

- AEC-Q200 qualified
- recommended for automotive applications
- reflow soldering temperature: 260 °C max.
- metal/ceramic package



General Data

type	JAS32P4	
frequency range	10.0 ~ 50.0 MHz	(fund. AT-cut)
frequency tolerance at 25 °C	± 10 ppm, ± 30 ppm, ± 50 ppm	
load capacitance C_L	12 pF standard	(option: 10 pF ~ 32 pF / series)
shunt capacitance C_0	< 5 pF	
storage temperature	-40 °C ~ +125 °C	
drive level max.	100 µW	(10 µW recommended)
aging	< ± 3 ppm first year	

ESR (series resistance R_s) at max. temp. range

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
10.0 ~ 11.999	fund.-AT	300	150
12.0 ~ 12.999	fund.-AT	100	50
13.0 ~ 15.999	fund.-AT	100	40
16.0 ~ 18.999	fund.-AT	80	40
19.0 ~ 21.999	fund.-AT	70	30
22.0 ~ 29.999	fund.-AT	70	25
30.0 ~ 50.000	fund.-AT	50	20

Frequency Stability vs. Temperature

		± 15 ppm	± 20 ppm	± 30 ppm	± 50 ppm	± 100 ppm
-20 °C ~ +70 °C	STD.	○*	○	○	○	○
-30 °C ~ +85 °C	T (-30/+85)	□	○	○	○	○
-40 °C ~ +85 °C	T1	◇	○	○*	○	○
-40 °C ~ +105 °C	T2				○	○
-40 °C ~ +125 °C	T3				○	○

○ available ◇ for frequencies > 20 MHz, ask if available < 20 MHz □ for frequencies < 20 MHz
 * best value for frequencies < 12.0 MHz

Marking

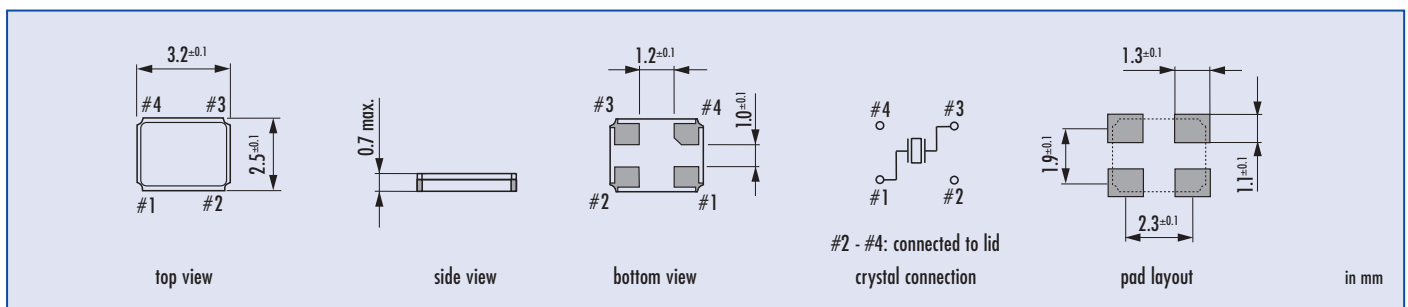
frequency with load capacitance code
 company code / date code / internal code

date code: year / month
 example: 1A = 2011 January

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

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

Dimensions



Order Information

Q	frequency	type	load capacitance	stability at 25 °C	stability vs. temp. range	option
Quartz	10.0 ~ 50.0 MHz	JAS32P4	12 pF standard 10 pF ~ 32 pF S for series	10 ± 10 ppm 30 ± 30 ppm 50 ± 50 ppm	15 ± 15 ppm 20 ± 20 ppm 30 ± 30 ppm 50 ± 50 ppm 100 ± 100 ppm	blank = -20 °C ~ +70 °C T (-30/+85) = -30 °C ~ +85 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C T3 = -40 °C ~ +125 °C

Example: Q 28.0-JAS32P4-12-30/50-T2-LF (Suffix LF = RoHS compliant / Pb free pads)