



actual size

JAG53P4 · AEC-Q200

4 Pad Version · 5.0 x 3.2 mm

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



General Data

type	JAG53P4	
frequency range	8.0 ~ 50.0 MHz	(fund. AT-cut)
	45.0 ~ 60.0 MHz	(3rd OT AT-cut)
frequency stability at 25 °C	± 30 ppm	
load capacitance C_L	12 pF standard	(option: 10 pF ~ 32 pF / series)
shunt capacitance C_0	< 7 pF max.	
storage temperature	-40 °C ~ +125 °C	
shock resistance	> 100 g	(half sine pulse, 6.0 ms)
drive level max.	100 µW	(10 µW recommended)
aging	< ± 3 ppm first year	

ESR (series resistance R_s)

frequency in MHz	vibration mode	ESR max. in Ω	ESR typ. in Ω
8.0 ~ 8.999	fund.-AT	300	200
9.0 ~ 9.999	fund.-AT	250	180
10.0 ~ 11.999	fund.-AT	150	100
12.0 ~ 19.999	fund.-AT	100	50
20.0 ~ 50.000	fund.-AT	50	35
45.0 ~ 60.000	3rd OT-AT	90	65

Frequency Stability vs. Temperature

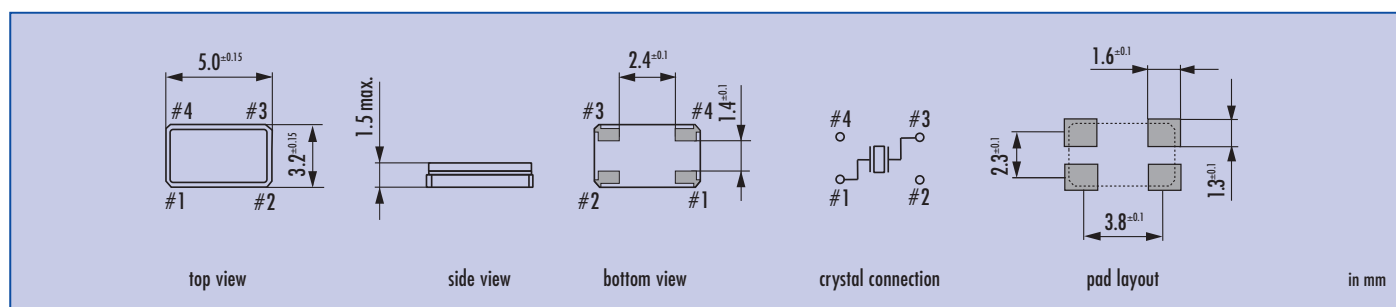
		± 30 ppm	± 50 ppm	± 100 ppm		
-20 °C ~ +70 °C	STD.	●	○	○		
-40 °C ~ +85 °C	T1	○	●	○		
-40 °C ~ +105 °C	T2			○		
-40 °C ~ +125 °C	T3			○		

● standard
○ available

Marking

frequency with load capacitance code					
company code / date code / internal code					
date code:			year / month		
example:			9A = 2009 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	8.0 ~ 60.0 MHz	JAG53P4	12 pF standard 10 pF ~ 32 pF S for series	30 = ± 30 ppm	30 = ± 30 ppm 50 = ± 50 ppm 100 = ± 100 ppm	blank = -20 °C ~ +70 °C T1 = -40 °C ~ +85 °C T2 = -40 °C ~ +105 °C T3 = -40 °C ~ +125 °C FU = for fundamental frequencies ≥ 20 MHz 30T = 3rd overtone

Example: Q 28.0-JAG53P4-12-30/30-FU-LF (Suffix LF = RoHS compliant / Pb free pads)