

# SiT9121A-B220001

100 MHz,  $\pm 25$  ppm MEMS XO for Analogic

PRELIMINARY



## Description

SiT9121A-B220001 is a 3.3V LVDS XO with  $\pm 25$  ppm stability in a 3.2x2.5 mm<sup>2</sup> QFN package.

SiT9121A-B220001 is engineered for best dynamic performance. Its environmental robustness enables unmatched ease-of-use and reduces system manufacturing overhead:

- Anywhere placement on the PCB
- No mechanical lid or shielding for thermal isolation
- No external regulators

Refer to [SiT9121 datasheet](#), reliability report and composition report for all other device specifications, quality and environmental information.

## Features

- Operating mode: XO
- Frequency: 100 MHz
- Frequency stability:  $\pm 25$  ppm
- Operating temperature range: -40 to 85 °C
- Power supply voltage: 3.3V
- LVDS output
- No activity dips or micro jumps
- Integrated regulators for on-chip power-supply noise filtering and excellent PSNR
- Resistant to shock, vibration and board bending
- 3.2 x 2.5 mm<sup>2</sup> industry-standard package

## Ordering Information

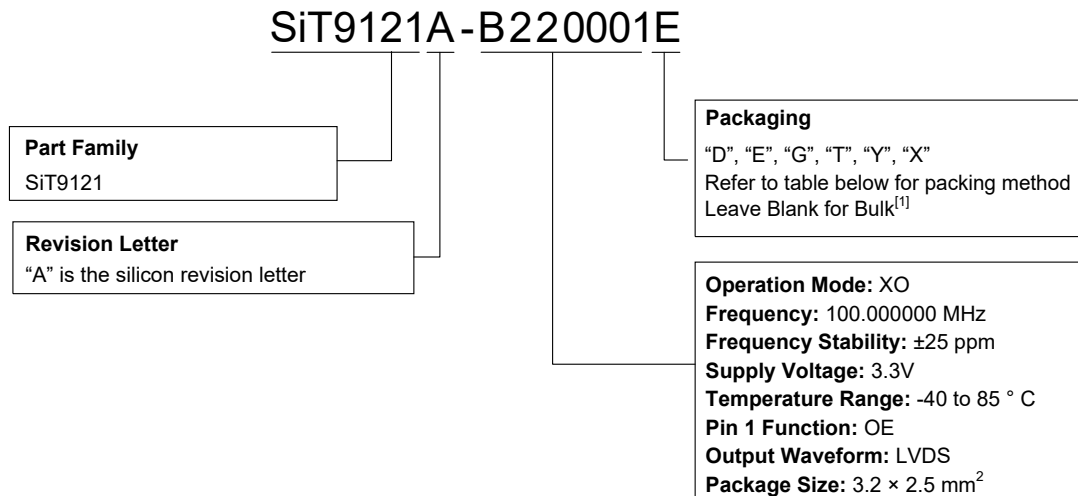


Figure 1. Order codes

### Notes:

1. Bulk is available for sampling only.

Table 1. Ordering Codes for Supported Tape & Reel Packing Method

Device Size (mm x mm)	8 mm T&R (3ku)	8 mm T&R (1ku)	8 mm T&R (250u)	12 mm T&R (3ku)	12 mm T&R (1ku)	12 mm T&R (250u)
3.2 x 2.5	D	E	G	T	Y	X

Table 2. Electrical Characteristics<sup>[2]</sup>

Parameters	Symbol	Min.	Typ.	Max.	Unit	Condition
<b>Frequency Coverage</b>						
Output Frequency Range	F		100		MHz	
<b>Frequency Stability</b>						
Frequency Stability	F_stab	-25	–	+25	ppm	Inclusive of initial tolerance, operating temperature, rated power supply voltage and load variations
<b>Supply Voltage</b>						
Supply Voltage	V <sub>DD</sub>	2.97	3.3	3.63	V	
<b>Temperature Range</b>						
Operating Temperature Range	T_use	-40	–	85	°C	Industrial, ambient temperature

**Note:**

- Refer to SiT9121 standard datasheet for all other specifications.

## Revision History

Table 3. Revision History

Version	Release Date	Change Summary
0.8	01/12/2020	Preliminary release

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