

# SiT9365A-BF40002

100 MHz, ±50 ppm MEMS XO for Cisco



## Description

The SiT9365A-BF40002 is a 3.3V HCSL XO with ±50 ppm stability in a 7.0x5.0 mm<sup>2</sup> QFN package.

Utilizing SiTime's unique DualMEMS™ temperature sensing and TurboCompensation™ technology, the SiT9365 delivers exceptional dynamic performance by providing resistance to airflow, thermal gradients, shock and vibration. This device also integrates multiple on-chip regulators to filter power supply noise, eliminating the need for a dedicated external LDO.

Refer to the SiT9365 datasheet, reliability report and composition report for all other device specifications, quality and environmental information.

## Features

- Operating mode: XO
- Frequency: 100 MHz
- Frequency stability: ±50 ppm
- Operating temperature range: -20 to 70 °C
- Power supply voltage: 3.3V
- HCSL output
- No activity dips or micro jumps
- Exceptional dynamic stability under airflow and rapid temperature changes
- Integrated regulators for on-chip power-supply noise filtering and excellent PSNR
- Resistant to shock, vibration and board bending
- 7.0 x 5.0 mm<sup>2</sup> industry-standard package

## Ordering Information

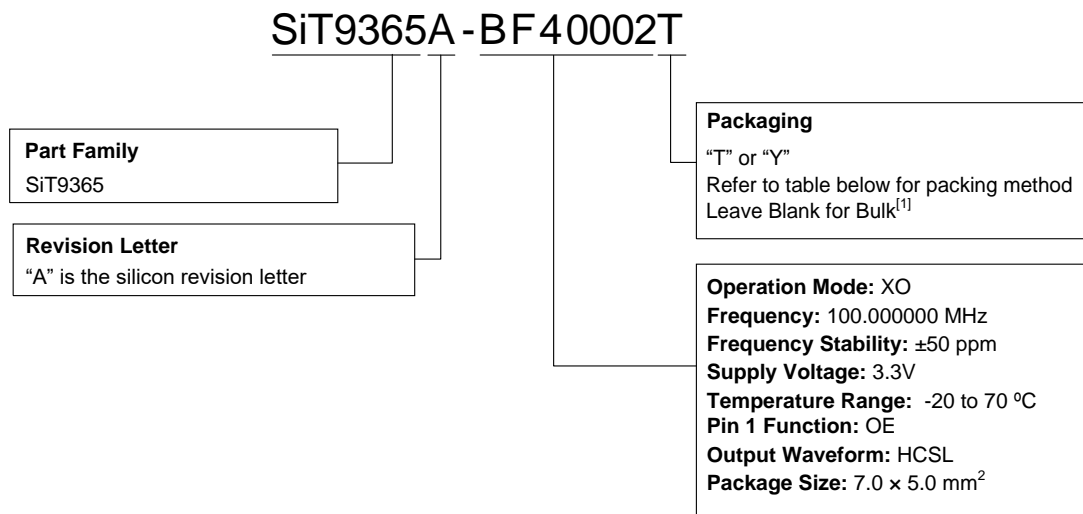


Figure 1. Order codes

### Notes:

1. Bulk is available for sampling only.

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

Device Size (mm x mm)	16 mm T&R (3ku)	16 mm T&R (1ku)
7.0 x 5.0	T	Y

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

Parameters	Symbol	Min.	Typ.	Max.	Unit	Condition
<b>Frequency Coverage</b>						
Output Frequency Range	F		100.000000		MHz	
<b>Frequency Stability</b>						
Frequency Stability	F_stab	-50	–	+50	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 <sub>use</sub>	-20	–	70	°C	Extended Commercial, ambient temperature

**Note:**

- Refer to SiT9365 standard datasheet for all other specifications.

## Revision History

Table 3. Revision History

Version	Release Date	Change Summary
0.80	10/08/2019	Preliminary release
0.81	10/08/2019	Fixed typo in ordering code example
0.82	01/12/202	Revised part number
1.0	06/13/2020	Final release

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