

SiT5541A-WUC0002

Description

This datasheet addendum defines the configuration of custom part number SiT5541A-WUC0002, which is a configuration-specific version of the SiTime base SiT5541 datasheet. Please refer to the SiT5541 datasheet and related collateral for further information about this device. You can search for and download the base SiT5541 datasheet from the SiTime website. Request datasheet <https://www.sitime.com/request-datasheet> for more information.

Configuration Information

Custom Part Number: SiT5541A-WUC0002

Base Part Number: SiT5541

Silicon Revision: A

Frequency (MHz): 10.000000

Frequency Stability (PPM): ± 0.01

Supply Voltage (V): 3.3

Temperature Range ($^{\circ}\text{C}$): -40 to 105

Package Size (mm): 7.0x5.0

Feature Pin: TCXO NC

Pull Range (PPM): ± 0

Device Address: -

Special Features: Low Sensitivity, 0.1 ppb/g

Output Drive Strength: Clipped Sinewave

Packaging Options (Append to the end of the custom part number when ordering. For example, order SiT5541A-WUC0002T

for an 8mm Tape & Reel, 3ku Reel):

- "T": 16mm Tape & Reel, 3ku Reel
- "Y": 16mm Tape & Reel, 1ku Reel
- "X": 16mm Tape & Reel, 250u Reel
- "": (blank) Bulk for sampling only

Table 1. Electrical Characteristics

Parameters	Symbol	Min.	Typ.	Max.	Unit	Condition
Aging						
20-year Total Stability	F_20y	–	–	±150	ppb	At 85°C. Aging is measured when parts start operating. Complies with Stratum 3E per GR-1244-CORE. Actual performance is better
Initial Tolerance	F_init	–	–	±80	ppb	Initial frequency at 25°C at 48 hours after 2 reflows

Note: Refer to SiT5541 standard datasheet for all other specifications.

Revision History

Revision: 1

- Revision Date: 03/16/2023
- Initial Release

Revision: 2

- Revision Date: 10/09/2023
- Initial Tolerance and 20 Year Aging changed

Corporate Headquarters

SiTime Corporation
5451 Patrick Henry Drive
Santa Clara, CA 95054, USA

Contact Information

For further information on a product, technology, document, or to locate your nearest sales office, please visit:
<https://www.sitime.com>

Phone: +1-408-328-4400
FAX: +1-408-328-4439

Notice

© SiTime Corporation 2021. The information contained herein is subject to change at any time without notice. SiTime assumes no responsibility or liability for any loss, damage or defect of a Product which is caused in whole or in part by (i) use of any circuitry other than circuitry embodied in a SiTime product, (ii) misuse or abuse including static discharge, neglect or accident, (iii) unauthorized modification or repairs which have been soldered or altered during assembly and are not capable of being tested by SiTime under its normal test conditions, or (iv) improper installation, storage, handling, warehousing or transportation, or (v) being subjected to unusual physical, thermal, or electrical stress.

Disclaimer: SiTime makes no warranty of any kind, express or implied, with regard to this material, and specifically disclaims any and all express or implied warranties, either in fact or by operation of law, statutory or otherwise, including the implied warranties of merchantability and fitness for use or a particular purpose, and any implied warranty arising from course of dealing or usage of trade, as well as any common-law duties relating to accuracy or lack of negligence, with respect to this material, any SiTime product and any product documentation. Products sold by SiTime are not suitable or intended to be used in a life support application or component, to operate nuclear facilities, or in other mission critical applications where human life may be involved or at stake. All sales are made conditioned upon compliance with the critical uses policy set forth below.

CRITICAL USE EXCLUSION POLICY

BUYER AGREES NOT TO USE SITIME'S PRODUCTS FOR ANY APPLICATION OR IN ANY COMPONENTS USED IN LIFE SUPPORT DEVICES OR TO OPERATE NUCLEAR FACILITIES OR FOR USE IN OTHER MISSION-CRITICAL APPLICATIONS OR COMPONENTS WHERE HUMAN LIFE OR PROPERTY MAY BE AT STAKE.

SiTime owns all rights, title and interest to the intellectual property related to SiTime's products, including any software, firmware, copyright, patent, or trademark. The sale of SiTime products does not convey or imply any license under patent or other rights. SiTime retains the copyright and trademark rights in all documents, catalogs and plans supplied pursuant to or ancillary to the sale of products or services by SiTime. Unless otherwise agreed to in writing by SiTime, any reproduction, modification, translation, compilation, or representation of this material shall be strictly prohibited.