

SiT5711A-KX-0001

40 MHz, ±10 ppb MEMS OCXO for Nvidia-Mellanox



Description

SiT5711A-KX-0001 is a frequency specific version of the SiT5711 MEMS DCOCXO that supports 40 MHz output and ±10 ppb frequency stability over temperature.

The SiT5711A-KX-0001 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
- No additional sealing in high humidity environments

Refer to the [SiT5711](#) datasheet, reliability report and composition report for all other device specifications, quality and environmental information.

Features

- Frequency: 40 MHz
- Frequency stability: ±10 ppb
- Operating temperature range: -40 to 85°C
- 3.3 V supply voltage
- LVC MOS output
- 1.5E-11 ADEV at 10 second averaging time
- Exceptional dynamic stability under airflow and rapid temperature changes
- Integrated regulators for on-chip power-supply noise filtering and excellent PSRR
- Resistant to shock, vibration and board bending
- Standard 9 x 7 mm² footprint
- Pb-free, RoHs and REACH compliant

Ordering Information

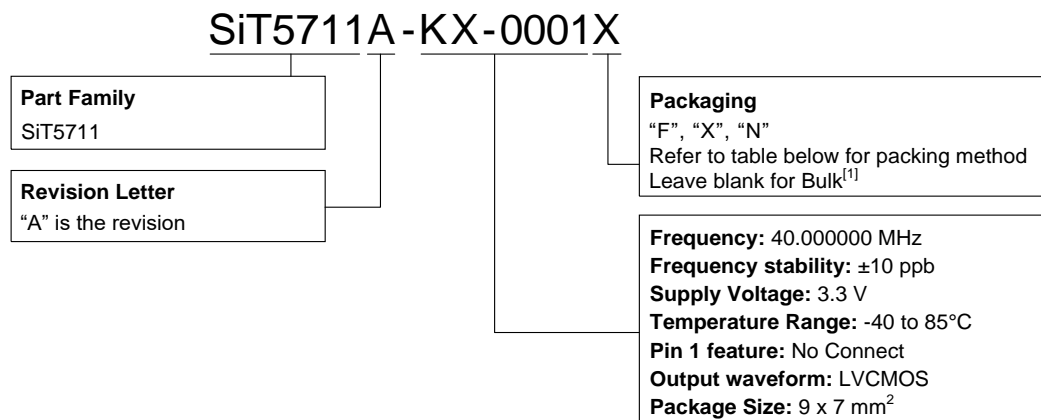


Figure 1. Order codes

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

Device Size (mm x mm)	24 mm T&R (<250 units) ^[2]	24 mm T&R (250 units)	24 mm T&R (500 units)
9 x 7	F	X	N

Notes:

1. Bulk is available for sampling only
2. Contact [SiTime](#) for minimum order quantities for <250 units.

Table 2. Electrical Characteristics^[3]

Parameters	Symbol	Min.	Typ.	Max.	Unit	Condition
Frequency Coverage						
Output Frequency Range	F	40			MHz	
Frequency Stability						
Frequency Stability over Temperature	F_stab	-10	–	+10	ppb	Referenced to (fmax – fmin)/2 over the specified temperature range
Frequency vs. Temperature Slope	$\Delta F/\Delta T$	–	±0.2	–	ppb/°C	In still air, 1°C/min ramp rate
Supply Voltage						
Supply Voltage	V _{DD}	3.14	3.3	3.45	V	
Temperature Range						
Operating Temperature Range	T _{use}	-40	–	+85	°C	

Note:

3. Refer to SiT5711 standard datasheet for all other specifications.

Revision History

Table 3. Revision History

Version	Release Date	Change Summary
1.0	19-Mar-2021	First release

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