



# 201006874 Si54x, Si56x Oscillator Datasheet Version 1.2 Release for 2.5x3.2 mm Packag

**PCN Issue Date:** 10/6/2020

**Effective Date:** 1/12/2021

**PCN Type:** Datasheet

## Description of Change

Silicon Labs is pleased to announce the release of version 1.2 of the Si54x and Si56x oscillator datasheets. This updated datasheet is accompanied by the release of the new 2.5x3.2 mm package. The datasheet changes are as follows:

- Updated page 1 with the new 2.5x3.2 mm package image
- Updated page 2 "Ordering Guide" by adding the new 2.5x3.2 mm ordering option letter
- Updated Table 2.1 to include a VDD maximum ramp rate specification on startup
- Updated Table 2.1 to split the LVDS swing specification at 1.4GHz
- Updated table 2.4 with the 2.5x3.2 mm package MSL rating
- Updated table 2.4 to include the device contact pin plating thickness info
- Updated table 2.5 with the 2.5x3.2 mm package thermal data
- Updated Sec 5 (for I2C devices) to improve example code and correct HSDIV for frequencies <10 MHz
- Updated Table 5.1 to include the L2/L3 dimension for 5x7-8pin package outline drawings
- Added section 5.3 "Package Outline (2.5x3.2 mm)"
- Added section 6.3 "PCB Land Pattern (2.5x3.2 mm)"
- Added section 8 "Top Marking (2.5x3.2 Package)"

The 2.5x3.2 mm package size is indicated in the part number with a "C" ordering option (for example 545xxxxxxxxxxCBG, where the "xxxxxxxxxx" represents a custom part number based on ordering option).

These datasheet changes apply to all Si54x and Si56x oscillators. Part numbers for these devices have the form shown in the Product Identification section below.

## Reason for Change

Release of a new 2.5x3.2 mm package, inclusion of a VDD maximum ramp rate specification, and minor edits to better clarify specs and improve communication.

## Impact on Form, Fit, Function, Quality, Reliability

Impact to Function as we are now including a maximum VDD ramp rate specification on startup for all package sizes.

## Product Identification

Existing Part #  
54xxxxxxxxxxxxxxxxxG  
54xxxxxxxxxxxxxxxxxGR  
56xxxxxxxxxxxxxxxxxG  
56xxxxxxxxxxxxxxxxxGR

**Last Date of Unchanged Product:** 1/12/2021

## Qualification Samples

Available upon request.

## Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at <http://www.silabs.com>.

Customers may approve early PCN acceptance by emailing approval, along with PCN # to [PCNEarlyAcceptance@silabs.com](mailto:PCNEarlyAcceptance@silabs.com)

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