

## Product Change Notice

Issue Date: 07-February-2022

**Change Description:**

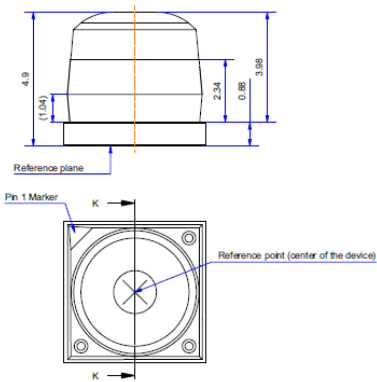
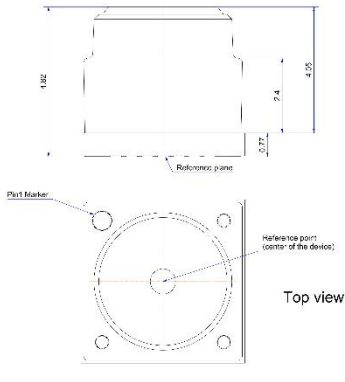
1. Change of Vertical Cavity Surface Emitting Laser (VCSEL)
2. Change of lens tool
3. Improved PCB layout

**Parts Affected:**

AFBR-FS13B25

**Description and Extent of Change:**

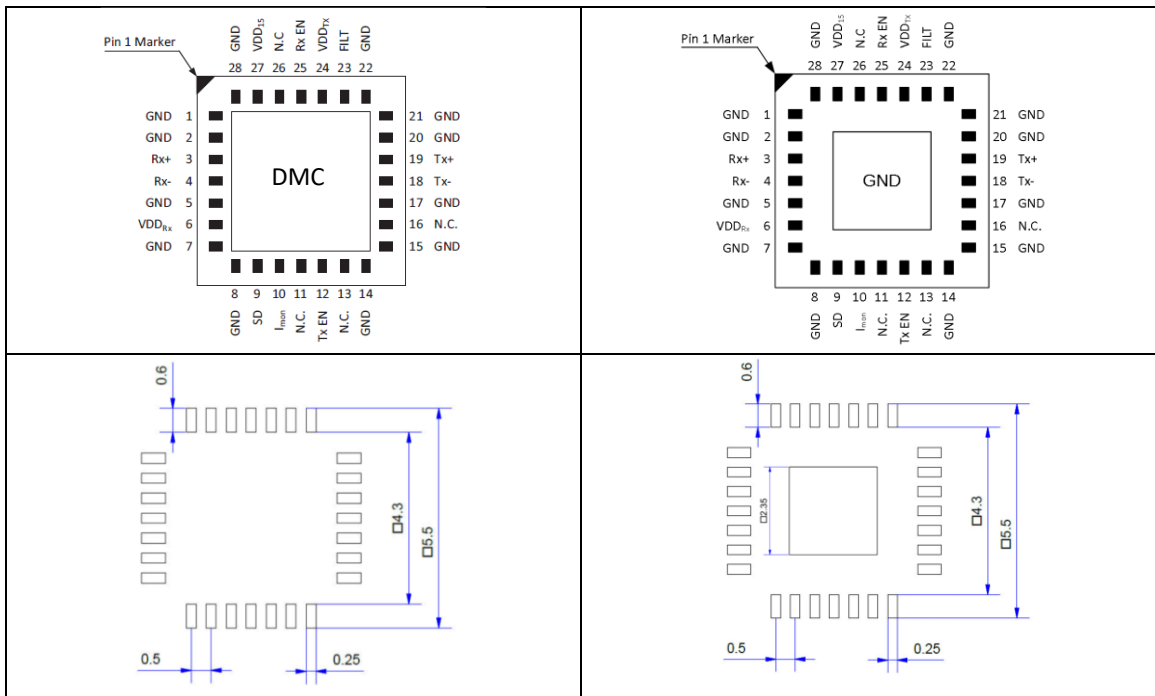
1. **Change of Vertical Cavity Surface Emitting Laser (VCSEL):**  
Current VCSEL temperature range is limited and reaches -10...85°C. The new VCSEL achieves the industrial temperature range from -40...85°C.
  
2. **Change of lens tool:**  
Current lens tool will be replaced by high volume capable tool. No change in the optical characteristic of the farfield (optical beam). No change of material.

Current	New
 <p>The current diagrams show a side view of the VCSEL with dimensions: total height 4.9, lens height 1.94, VCSEL height 2.34, and a 0.85 offset. A reference plane is indicated. Below is a top view of the PCB layout with a pin 1 marker, a reference point at the center, and a 'K' orientation marker.</p>	 <p>The new diagrams show a side view of the VCSEL with dimensions: total height 4.95, lens height 1.92, VCSEL height 2.4, and a 0.37 offset. A reference plane is indicated. Below is a top view of the PCB layout with a pin 1 marker, a reference point at the center, and the text 'Top view'.</p>

**3. Improved PCB layout:**

The PCB layout has been improved. Currently the inner area is used for the Data Matrix Code (DMC) and not soldered to the customer board. The high frequency properties are improved by the new design and the inner area has to be connected to GND. As a consequence the DMC will be removed. Hence the recommended solder pad layout is changed accordingly.

Current	New
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**Reasons for Change:**

Improvement of performance and increasing of temperature range to -40...85°C.

**Effect of Change on Fit, Form, Function, Quality, or Reliability:**

Improved product performance. Effects on function of the device are described above. No effect on optical compatibility with existing products.

Reliability tests have been performed successfully and are still ongoing to ensure product reliability.

**Effective Date of Change:**

Product shipments using this change will begin after 05/08/2022. Timing of shipment of the changed part will vary by part number depending on qualification completion, customer demand, and inventory levels.

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Please contact your Broadcom field sales engineer or Contact Center for any questions or support requirements. Please acknowledge the receipt of the notice within 30 days of delivery. Lack of acknowledgement within 30 days constitutes acceptance of the change per JEDEC J-STD-046.