Pin Configuration

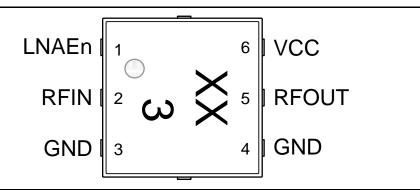


Figure 2 · Pinout

- Top view XX = Encoded date code
- 1.5 x 1.5 x 0.5mm DFN package

Ordering Information

| Ambient Temperature | Туре | Package | Part Number | Packaging Type |
|------------------------|------------------|---------------|--------------|----------------|
| 0°C to 70°C | RoHS2 compliant, | DFN 1.5x1.5 - | LX5563LL | Bulk / Tube |
| | Pb-free | 6L | LX5563LL -TR | Tape and Reel |

Pin Description

| Pin Number | Pin Designator | Description |
|------------|----------------|--|
| 1 | LNAEn | LNA Enable/Bypass mode select |
| 2 | RFIN | RF input. This pin is AC coupled to the transistor; no DC blocking is required. |
| 3 | GND | Ground |
| 4 | GND | Ground |
| 5 | RFOUT | RF output. This pin is AC coupled to the transistor; no DC blocking is required. |
| 6 | VCC | 3.3V Supply voltage |



Absolute Maximum Ratings

| Parameter | Value | Units |
|-------------------------------------|------------|-------|
| DC Supply Voltage, RF off | 4 | V |
| RF input power | +10 | dBm |
| Operational ground slug temperature | 0 to 70 | °C |
| Storage temperature range | -65 to 150 | °C |

Note: Stresses in excess of these absolute ratings may cause permanent damage. The device is not implied to be functional under these conditions.

General Electrical Characteristics

| Symbol | Parameter | Test Condition | Min | Тур | Max | Units |
|--------|-------------------|----------------|---------|-----|-----|-------|
| VCC | Operating voltage | | 3 | 3.3 | 3.6 | V |
| VIH | Logic high | LNAEn | VCC-1.1 | | 3.6 | V |
| VIL | Logic low | LNAEn | 0 | | 0.8 | V |
| | ESD | All pins, HBM | 1500 | | | V |

Note: The device may be operated safely over these conditions. However, performance is guaranteed only over the conditions defined in the electrical specifications. Although this device is designed to be as robust as possible, Electrostatic Discharge (ESD) can damage this device. This device must be protected at all times from ESD. Static charges may easily produce potentials of several kilovolts on the human body or equipment, which can discharge without detection. Industry-standard ESD precautions should be used at all times.

Application Information

The LX5563 is fully matched on both RF ports. No external matching is required. An external decoupling capacitor is recommended on the supply line, as shown in Figure $4 \cdot .$

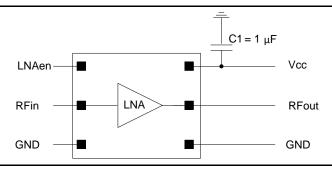
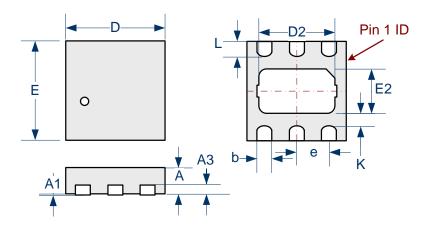


Figure 3 - Application Schematic

Figure 4 - Application Schematic

Package Outline Dimensions

The package is halogen free and meets RoHS2 and REACH standards.



| DIM | MILLIMETERS | | Inches | | |
|-------|-------------|----------|-----------|-------|--|
| DIIVI | MIN | MAX | MIN | MAX | |
| Α | 0.41 | 0.50 | 0.016 | 0.020 | |
| A1 | 0.0 | 0.05 | 0.0 | 0.002 | |
| А3 | 0.15 REF | | 0.006 REF | | |
| b | 0.18 | 0.30 | 0.07 | 0.012 | |
| D | 1.50 BSC | | 0.059 BSC | | |
| D2 | 1.05 | 1.30 | 0.041 | 0.051 | |
| Е | 1.50 BSC | | 0.059 BSC | | |
| E2 | 0.55 | 0.80 | 0.022 | 0.031 | |
| е | 0.50 | 0.50 BSC | | BSC | |
| K | 0.15 | - | 0.006 | - | |
| L | 0.125 | 0.225 | 0.005 | 0.009 | |

Figure 5 · 6 Pin DFN Package Dimensions



Recommended PCB Footprint

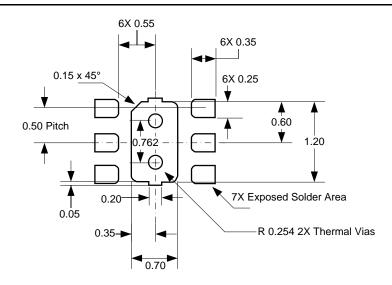


Figure 6 - PCB Layout Footprint (Top View)

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LX5563.0/0.2.5