

### Device Features

- Typical Isolation = 20.0 dB
- Typical Insertion Loss = 0.6 dB
- MSL 3 moisture rating
- Small Size and Low Profile
- RoHS2-compliant SOT-26 Plastic Package



BD23XX(XX=Wafer number)

### Product Description

BeRex's Divider BD2326 is designed for PCS, WCDMA & TD-SCDMA and WiBro band with low Insertion Loss and Isolation. This chip is fully passivated for enhanced performance and reliability and packaged in RoHS2-compliant with SOT-26 surface mount package.

### Typical Performance<sup>1</sup>

| Parameter         | Min  | Typical | Max  | Unit |
|-------------------|------|---------|------|------|
| Frequency Range   | 1900 |         | 2500 | MHz  |
| Insertion Loss    |      | 0.65    | 0.9  | dB   |
| Isolation         | 15   | 20      |      | dB   |
| IRL(S11)          |      | -15     | -10  | dB   |
| ORL(S22/S33)      |      | -22     | -18  | dB   |
| Amplitude Balance |      | 0.06    | 0.2  | dB   |
| Phase Balance     |      | 0.8     | 1.0  | deg  |

\*All specifications apply to the following test conditions,

1. Device performance \_ measured on BeRex E/B at 25°C, 50ohm system.
2. Insertion Loss: Above 3.0dB.

### Applications

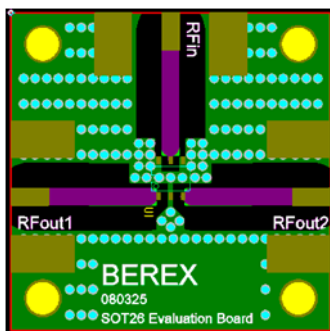
- Base station Infrastructure
- Commercial/Industrial/Military wireless system

### Absolute Maximum Ratings

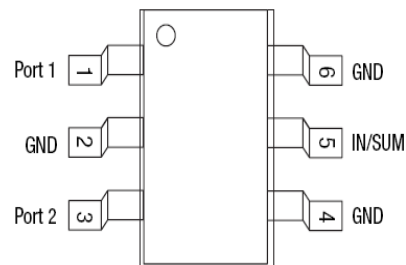
| Parameter             | Rating        |
|-----------------------|---------------|
| Input Power           | 1W CW dBm     |
| Storage Temperature   | -55 to +155°C |
| Operating Temperature | -40 to +85°C  |

Operation of this device above any of these parameters may result in permanent damage.

### Evaluation Board Drawing



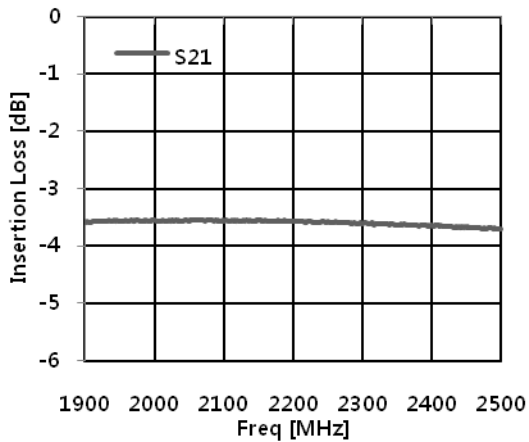
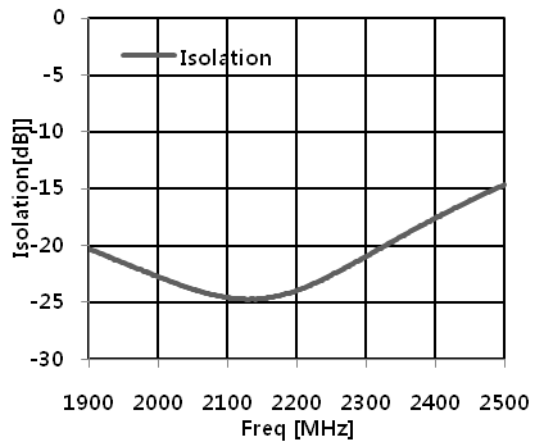
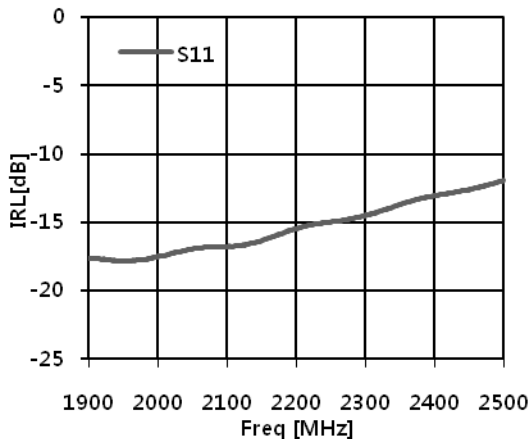
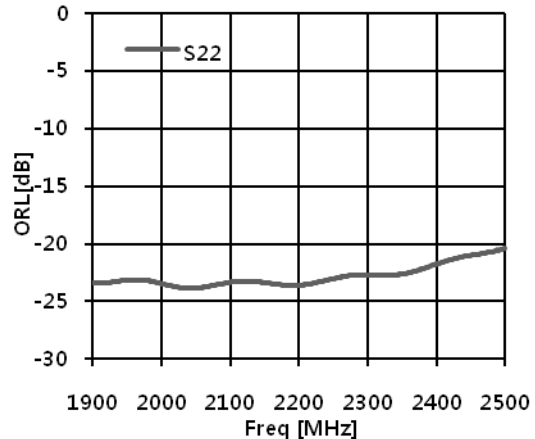
### Function Block Diagram



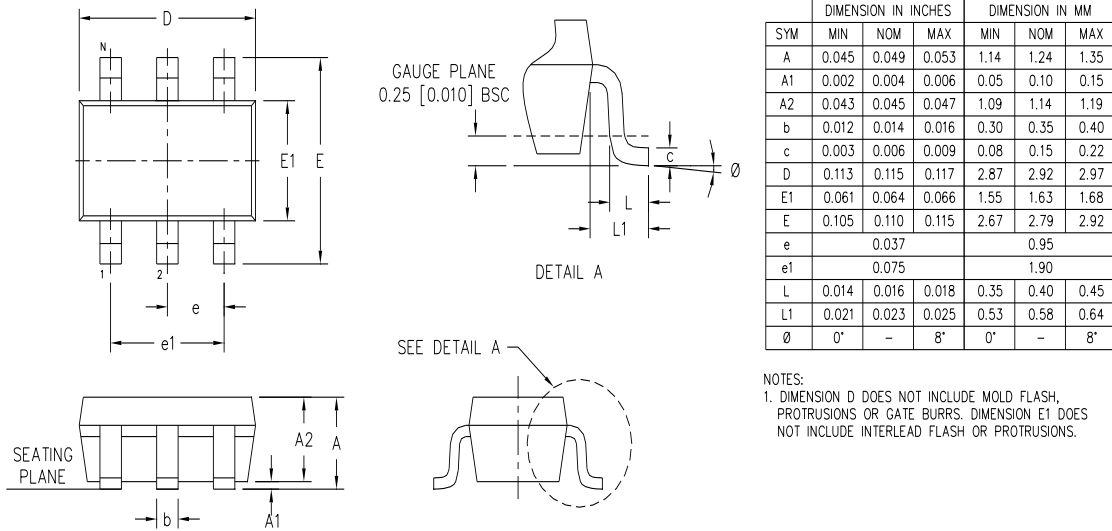
Pins 2,4 and 6 must be DC and RF grounded.

**Typical Test Data**

| Parameters        | Unit | WCDMA & TD-SCDMA |       |       | WiBro |       |       |
|-------------------|------|------------------|-------|-------|-------|-------|-------|
|                   |      | 1900             | 2075  | 2250  | 2200  | 2350  | 2500  |
| Frequency Range   | MHz  | 1900             | 2075  | 2250  | 2200  | 2350  | 2500  |
| Insertion Loss    | dB   | 0.58             | 0.59  | 0.64  | 0.62  | 0.69  | 0.77  |
| Isolation         | dB   | 23.33            | 27.55 | 23.28 | 24.47 | 19.58 | 15.03 |
| IRL(S11)          | dB   | 17.93            | 17.05 | 14.94 | 15.89 | 13.83 | 12.10 |
| ORL(S22,S33)      | dB   | 21.92            | 23.04 | 22.90 | 22.81 | 22.00 | 20.09 |
| Phase Diff.       | deg  | 0.69             | 0.76  | 0.60  | 0.84  | 0.56  | 0.62  |
| Amplitude Balance | dB   | 0.03             | 0.04  | 0.06  | 0.05  | 0.06  | 0.09  |

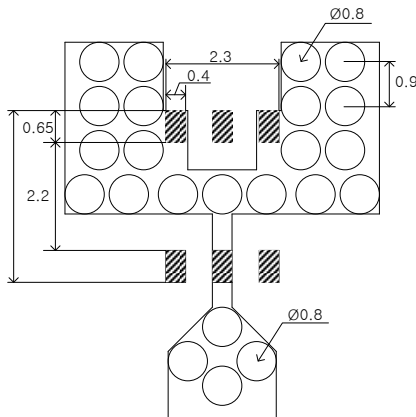
**Insertion Loss vs. Frequency**

**Isolation vs. Frequency**

**IRL vs. Frequency**

**ORL vs. Frequency**


### Package Outline Drawing

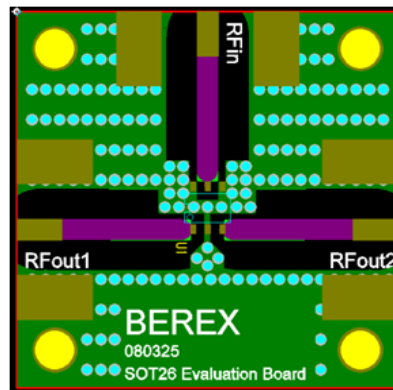


### Suggested PCB Land Pattern and PAD Layout

#### PCB Land Pattern



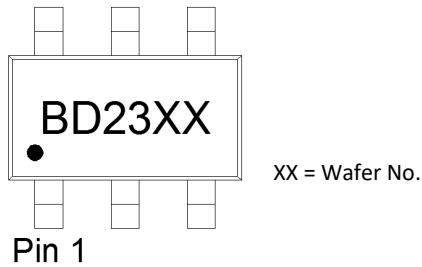
#### PCB Mounting



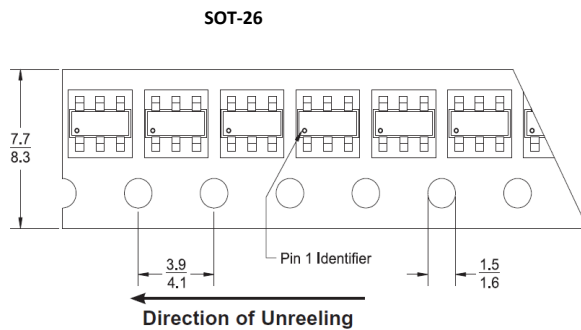
Note : All dimension \_ millimeters

PCB lay out \_ on BeRex website

## Package Marking



## Tape & Reel



Packaging information:

- Tape Width (mm): 8
- Reel Size (inches): 7
- Device Cavity Pitch (mm): 4
- Devices Per Reel: 2000

## Lead plating finish

### 100% Tin Matte finish

(All BeRex products undergoes a 1 hour, 150 degree C, Anneal bake to eliminate thin whisker growth concerns.)

**MSL / ESD Rating****MSL Rating:** Level 3 at +260°C convection reflow**Standard:** JEDEC Standard J-STD-020

Proper ESD procedures should be followed when handling this device.

**RoHS Compliance**

This part is compliant with Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive 2011/65/EU as amended by Directive 2015/863/EU.

This product also is compliant with a concentration of the Substances of Very High Concern (SVHC) candidate list which are contained in a quantity of less than 0.1%(w/w) in each components of a product and/or its packaging placed on the European Community market by the BeRex and Suppliers.

**NATO CAGE code:**

|   |   |   |   |   |
|---|---|---|---|---|
| 2 | N | 9 | 6 | F |
|---|---|---|---|---|