

BD2326

Triple Band 2-Way SMT Power Divider

1900~2500MHz PCS, WCDMA & TD-SCDMA, WiBro



Device Features

- Typical Isolation = 20.0 dB
- Typical Insertion Loss = 0.6 dB
- MSL 3 moisture rating
- Small Size and Low Profile
- Lead-free/RoHS-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 RoHS-compliant with SOT-26 surface mount package.

Typical Performance¹

| 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 | dBm |
| ORL(S22/S33) | | -22 | -18 | dBm |
| 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

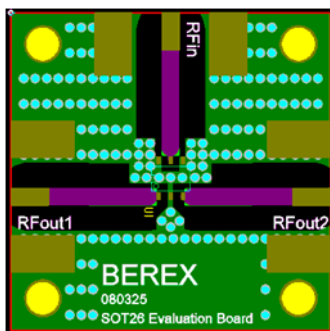
- Base station Infrastructure
- Commercial/Industrial/Military wireless system

Absolute Maximum Ratings

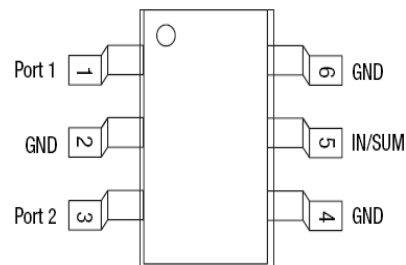
| Parameter | Rating |
|-----------------------|---------------|
| Input Power | 1W CW dBm |
| Storage Temperature | -55 to +155°C |
| Operating Temperature | -40 to +85°C |

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.

BD2326



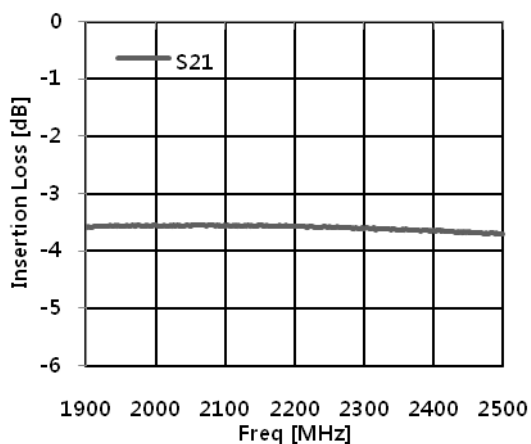
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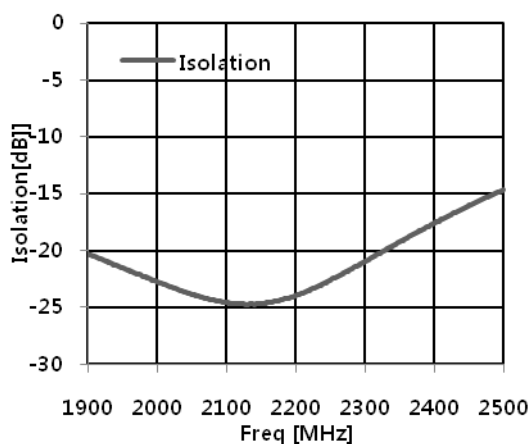
Typical Test Data

| 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 |

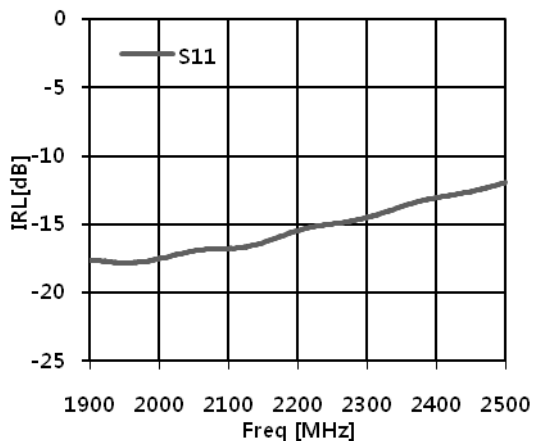
Insertion Loss vs. Frequency



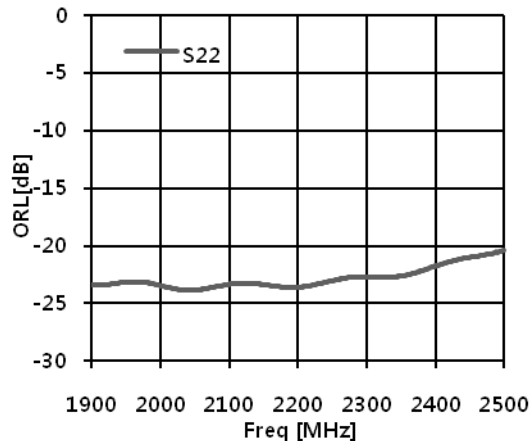
Isolation vs. Frequency



IRL vs. Frequency



ORL vs. Frequency



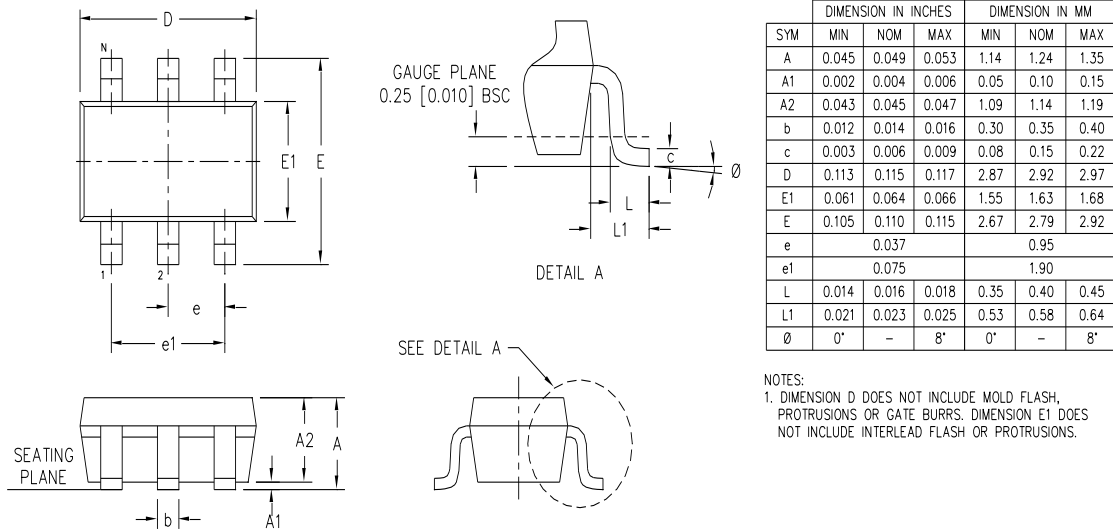
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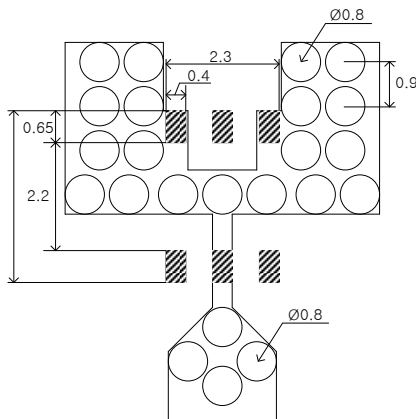


Package Outline Drawing

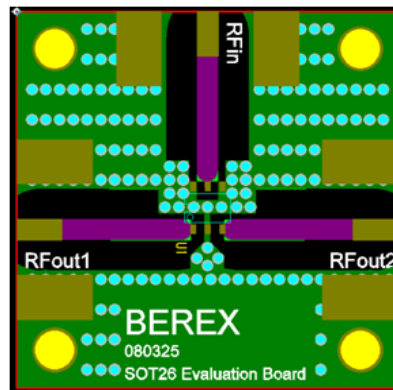


Suggested PCB Land Pattern and PAD Layout

PCB Land Pattern



PCB Mounting



Note : All dimension _ millimeters

PCB lay out _ on BeRex website

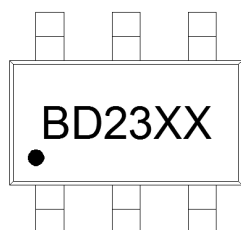
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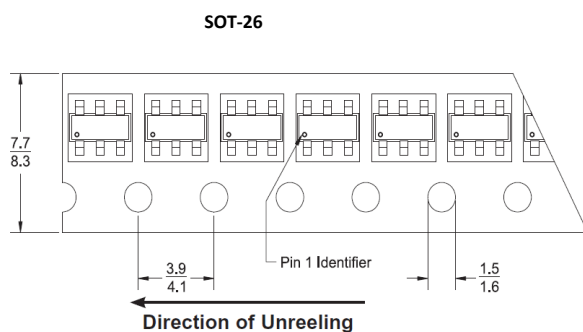
Package Marking



XX = Wafer No.

Pin 1

Tape & Reel



Packaging information:

Tape Width (mm): 8

Reel Size (inches): 7

Device Cavity Pitch (mm): 4

Devices Per Reel: 3000

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 +265°C convection reflow

Standard: JEDEC Standard J-STD-020

NATO CAGE code:

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