

2400~2900MHz WCDMA, WiBro & LTE

#### **Device Features**

- Typical Isolation = 25.0 dB
- Typical Insertion Loss = 0.6 dB
- MSL 3 moisture rating
- Small Size and Low Profile
- RoHS2-compliant SOT-26 Plastic Package



BD26XX(XX=Wafer number)

#### **Product Description**

BeRex's Divider BD2626 is designed for WCDMA WiBro & LTE 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	2400		2900	MHz
Insertion Loss		0.6	0.8	dB
Isolation	22	28		dB
IRL(S11)		-26	-21	dB
ORL(S22/S33)		-23	-21	dB
Amplitude Balance		0.1	0.15	dB
Phase Balance		0.75	1.5	deg

<sup>\*</sup>All specifications apply to the following test conditions,

#### **Applications**

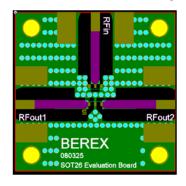
- Base station Infrastructure
- Commercial/Industrial/Military wireless system

#### **Absolute Maximum Ratings**

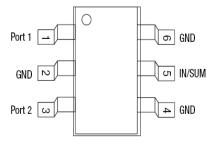
Parameter	Rating		
Input Power	1.5W CW dBm		
Storage Temperature	-55 to +155°C		
Operating Temperature	-40 to +85°C		

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.

<sup>1.</sup> Device performance \_ measured on BeRex E/B at 25°C, 50ohm system.

<sup>2.</sup> Insertion Loss: Above 3.0dB.

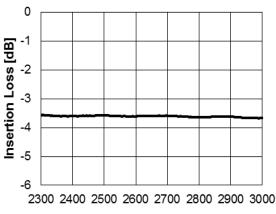


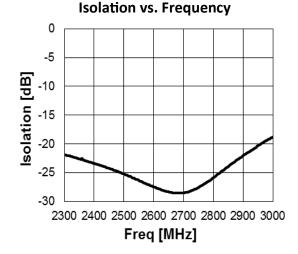
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## **Typical Test Data**

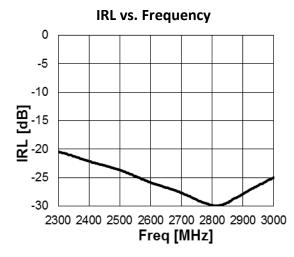
Parameters	Unit	WCDMA, WiBro & LTE				
Frequency Range	MHz	2400	2500	2650	2800	2900
Insertion Loss	dB	0.61	0.59	0.61	0.66	0.64
Isolation	dB	23.3	25.1	28.2	25.8	22.0
IRL(S11)	dB	-21.8	-23.6	-26.4	-29.0	-27.7
ORL(S22,S33)	dB	-22.6	-23.1	-23.0	-22.2	-21.3
Phase Diff.	deg	0.75	0.75	0.75	0.75	0.75
Amplitude Balance	dB	0.07	0.07	0.07	0.09	0.09

#### Insertion Loss vs. Frequency

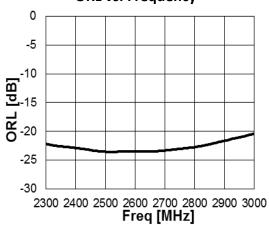




Freq [MHz]



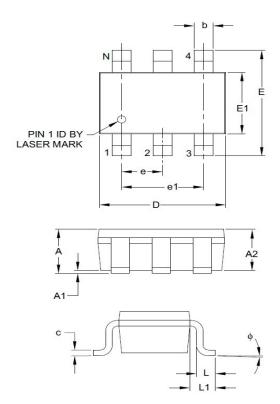
**ORL vs. Frequency** 





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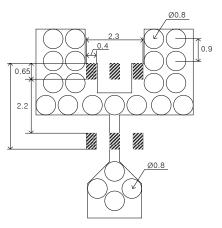
## **Package Outline Drawing**



Units		MILLIMETERS		
Dimension Limits		MIN	NOM	MAX
Number of Pins	N	6		
Pitch	е	0.95 BSC		
Outside Lead Pitch	e1	1.90 BSC		
Overall Height	Α	0.90	-	1.45
Molded Package Thickness	A2	0.89	-	1.30
Standoff	A1	0.00	_	0.15
Overall Width	E	2.20	-	3.20
Molded Package Width	E1	1.30		1.80
Overall Length	D	2.70	-	3.10
Foot Length	L	0.10	_	0.60
Footprint	L1	0.35	-	0.80
Foot Angle	ф	0°	-	30°
Lead Thickness	С	0.08	-	0.26
Lead Width	b	0.20	_	0.51

## **Suggested PCB Land Pattern and PAD Layout**

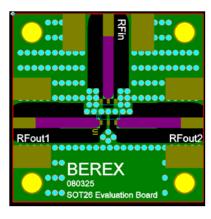
#### **PCB Land Pattern**



Note : All dimension \_ millimeters

PCB lay out \_ on BeRex website

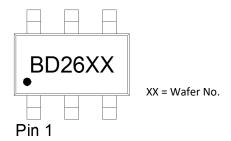
## **PCB Mounting**



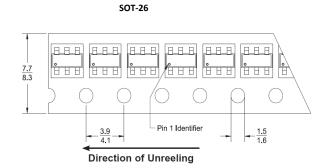


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## **Package Marking**



### 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.)



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### 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
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