

BD2626

Dual Band 2-Way SMT Power Divider

2400~2900MHz WCDMA, WiBro & LTE



Device Features

- Typical Isolation = 25.0 dB
- Typical Insertion Loss = 0.6 dB
- MSL 1 moisture rating
- Small Size and Low Profile
- Lead-free/RoHS-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 RoHS-compliant with SOT-26 surface mount package.

Typical Performance¹

Parameter	Min	Typical	Max	Unit
Frequency Range	2400		2900	MHz
Insertion Loss		0.6	0.8	dB
Isolation	21.5	28.0		dB
IRL(S11)		-26.0	-29.0	dBm
ORL(S22/S33)		-23.0	-26.0	dBm
Amplitude Balance		0.1	0.15	dB
Phase Balance		0.75	1.5	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

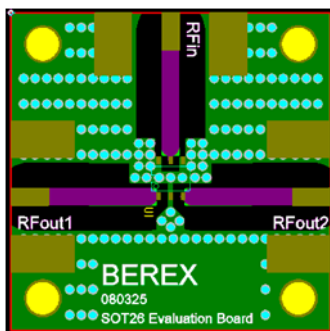
- Base station Infrastructure
- Commercial/Industrial/Military wireless system

Absolute Maximum Ratings

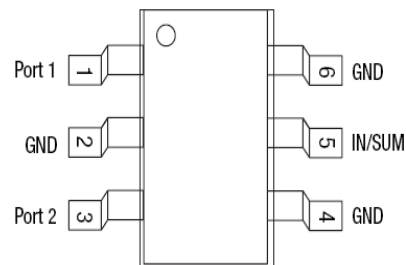
Parameter	Rating
Input Power	1.5W CW dBm
Storage Temperature	-55 to +155°C
Operating Temperature	-40 to +85°C

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.

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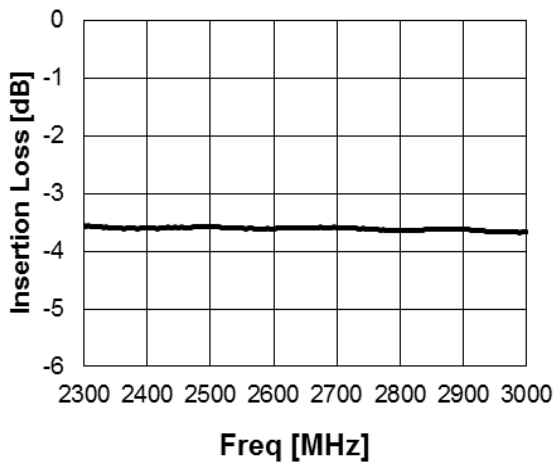
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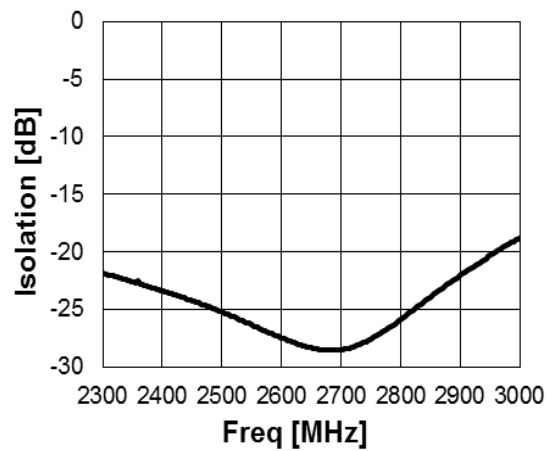
Typical Test Data

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

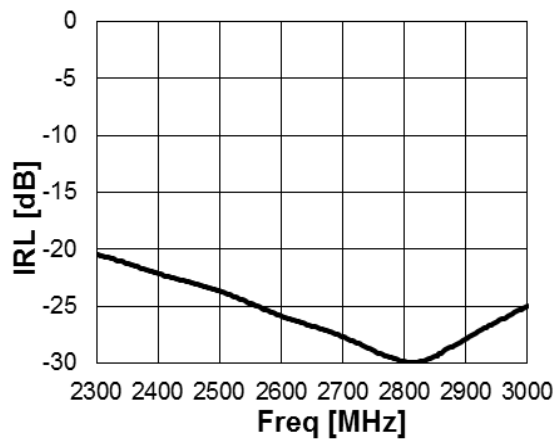
Insertion Loss vs. Frequency



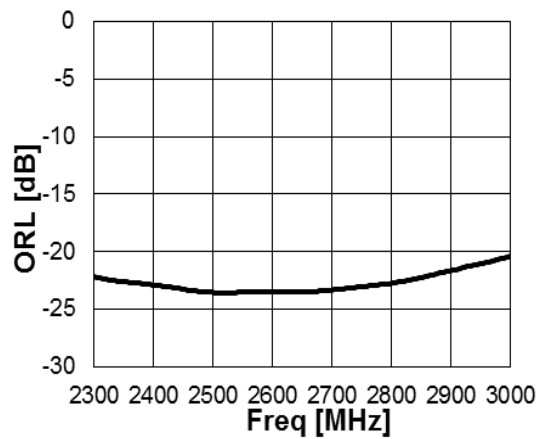
Isolation vs. Frequency



IRL vs. Frequency



ORL vs. Frequency



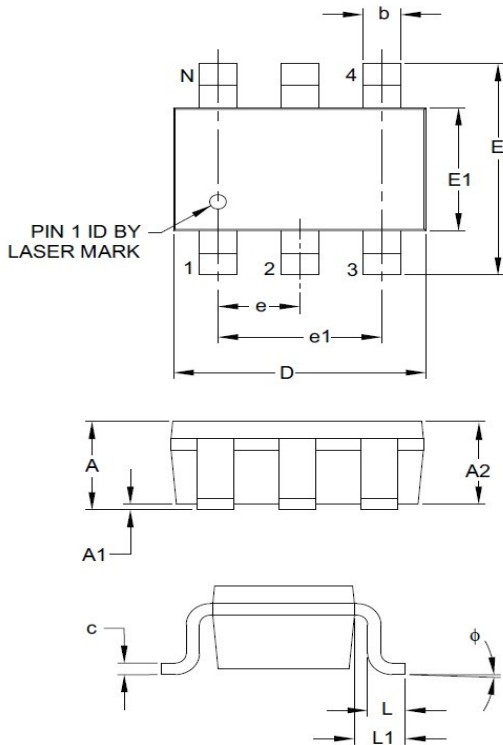
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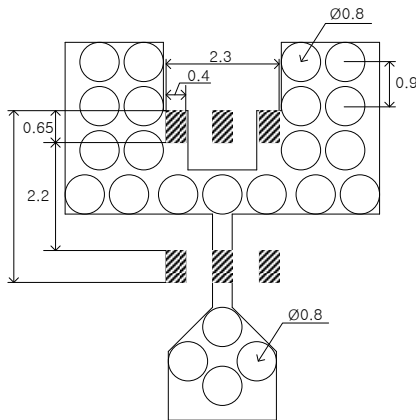
Package Outline Drawing



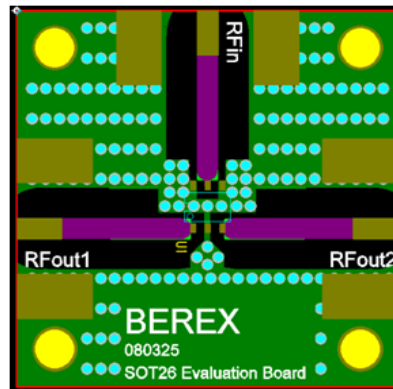
Dimension	Limits	MILLIMETERS		
		MIN	NOM	MAX
Number of Pins	N	6		
Pitch	e	0.95 BSC		
Outside Lead Pitch	e1	1.90 BSC		
Overall Height	A	0.90	—	1.45
Molded Package Thickness	A2	0.89	—	1.30
Standoff	A1	0.00	—	0.15
Overall Width	E	2.20	—	3.20
Molded Package Width	E1	1.30	—	1.80
Overall Length	D	2.70	—	3.10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

Suggested PCB Land Pattern and PAD Layout

PCB Land Pattern



PCB Mounting



Note : All dimension _ millimeters

PCB lay out _ on BeRex website

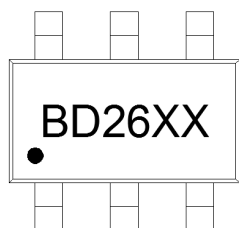
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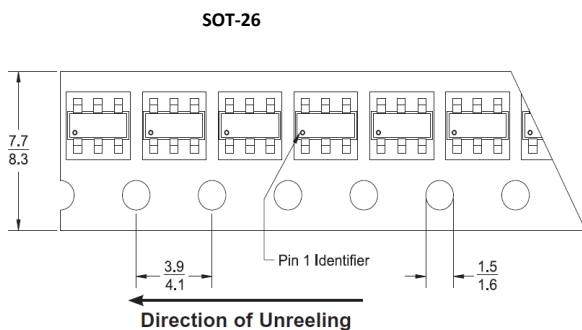
Package Marking



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
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