

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

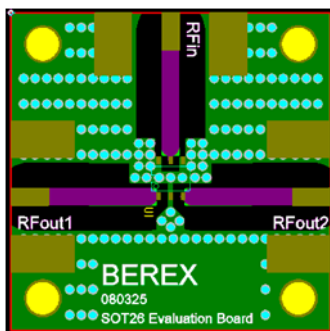
- Base station Infrastructure
- Commercial/Industrial/Military wireless system

Absolute Maximum Ratings

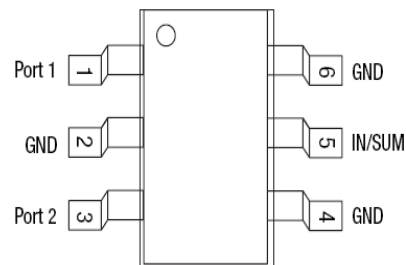
Parameter	Rating
Input Power	1.5W CW dBm
Storage Temperature	-55 to +155°C
Operating Temperature	-40 to +85°C

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.

BD2626



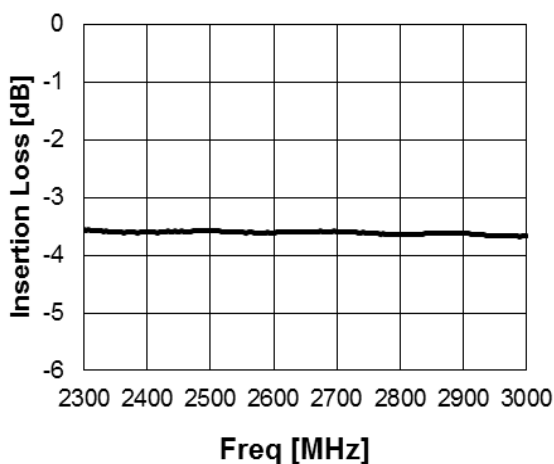
Dual Band 2-Way SMT Power Divider

2400~2900MHz WCDMA, WiBro & LTE

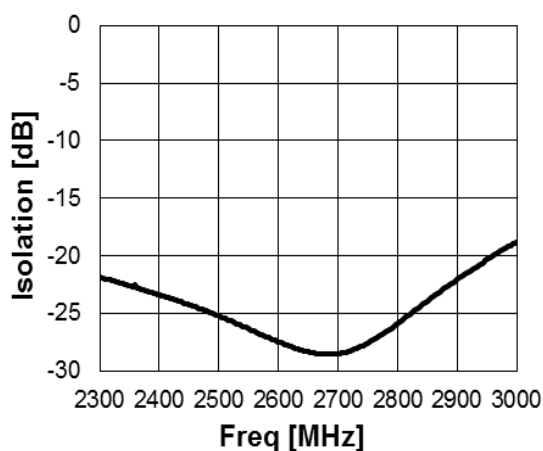
Typical Test Data

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

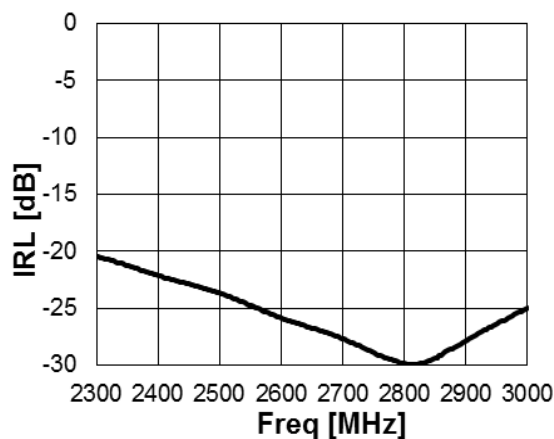
Insertion Loss vs. Frequency



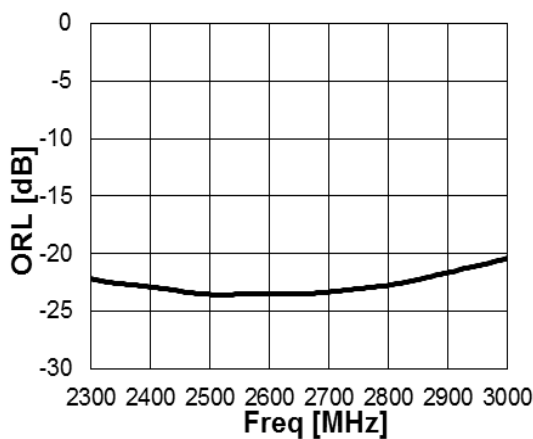
Isolation vs. Frequency



IRL vs. Frequency



ORL vs. Frequency



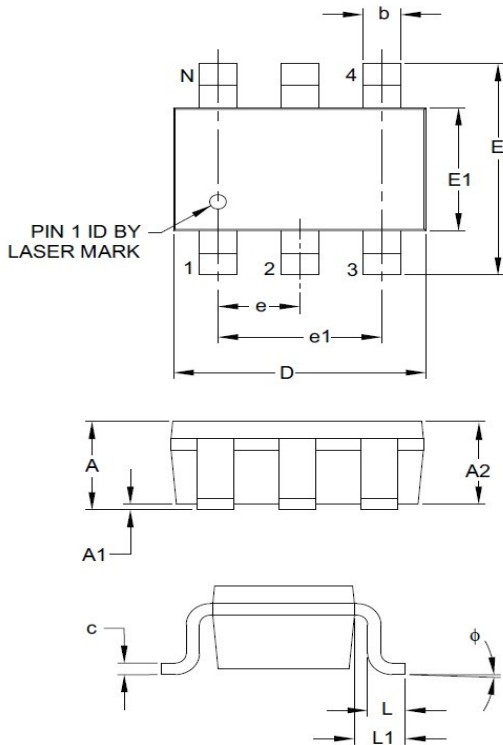
BD2626

Dual Band 2-Way SMT Power Divider

2400~2900MHz WCDMA, WiBro & LTE



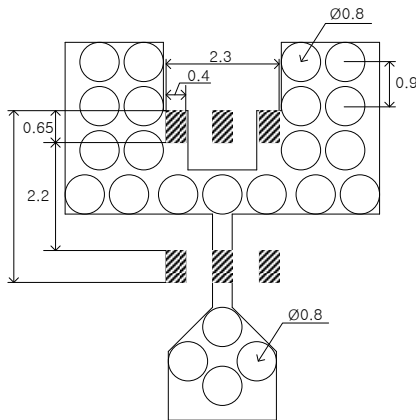
Package Outline Drawing



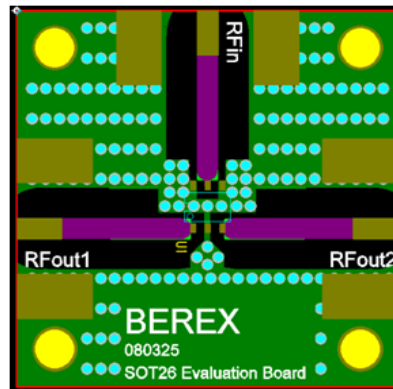
Dimension	Limits	MILLIMETERS		
		MIN	NOM	MAX
Number of Pins	N	6		
Pitch	e	0.95 BSC		
Outside Lead Pitch	e1	1.90 BSC		
Overall Height	A	0.90	—	1.45
Molded Package Thickness	A2	0.89	—	1.30
Standoff	A1	0.00	—	0.15
Overall Width	E	2.20	—	3.20
Molded Package Width	E1	1.30	—	1.80
Overall Length	D	2.70	—	3.10
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

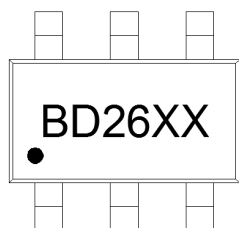
BD2626

Dual Band 2-Way SMT Power Divider

2400~2900MHz WCDMA, WiBro & LTE



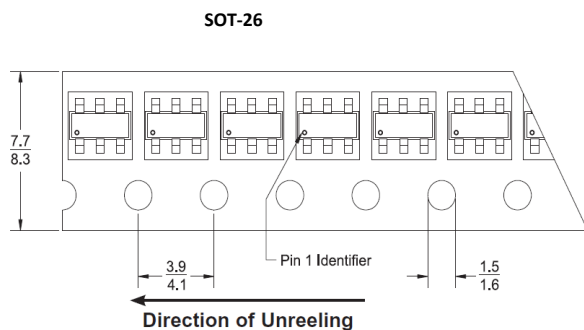
Package Marking



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
---	---	---	---	---