

TAB001

50 GHz Differential Amplifier - Active Balun

Features

- ◆ Single End to Differential Conversion
- ◆ Can Also Be Used as a Differential Amplifier
- ◆ Up to 50 GHz Operation
- ◆ Amplitude Match of ± 0.2 dB up to 30GHz
- ◆ Phase Match of ± 5 Degrees up to 30GHz
- ◆ Selectable Gain: 0, 6, 14, 20dB
- ◆ Single Power Supply: -5.2V
- ◆ 4mm x 4mm QFN Package
- ◆ Power Dissipation of 700mW

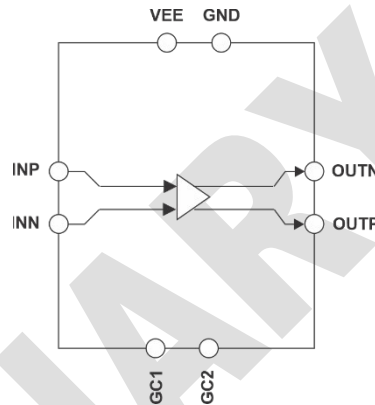



Figure 1 - Functional Block Diagram.

Product Description

The active balun is a single end to differential, or differential to differential amplifier with selectable gain. With a very good amplitude and phase

match up to 50GHz it is ideal for RF applications where a single end signal needs to be converted to a differential signal.

Ordering information

PART NUMBER	DESCRIPTION	<p style="text-align: center;">CAUTION</p> <p style="text-align: center;">DEVICE SUSCEPTIBLE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD)</p> 
TAB001-QN	50GHz Active Balun	
EVTAB001	Evaluation Board	

Pin Description and Pin Out (20 I/O QFN Package)

P/I/O	PIN	NUM.	NAME	FUNCTION
P	1,3,5,8,11,13,15,16, 18,19,bottom pad	11	GND	Power Supply Ground
P	6,7,17,20	4	VEE	Positive Power Supply
I	2	1	INP	Input
I	4	1	INN	
O	12	1	OUTP	Output
O	14	1	OUTN	
I	9	1	GC1	2 Bit Gain Control
I	10	1	GC2	

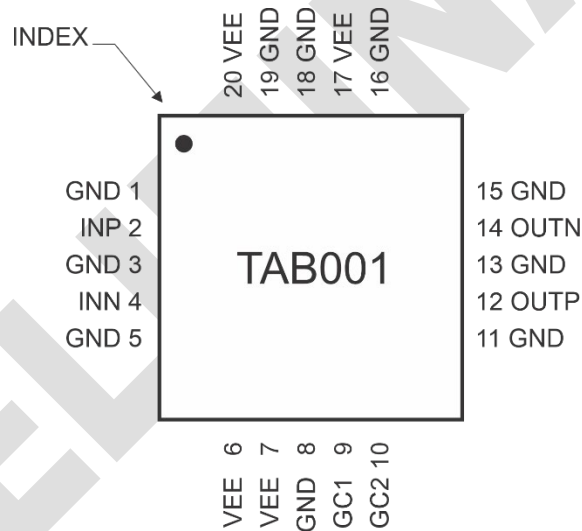


Figure 2 – TAB001 pinout (top view) 20 I/O QFN package.

Package Information -QN

The package is an organic laminate 20 IO QFN.

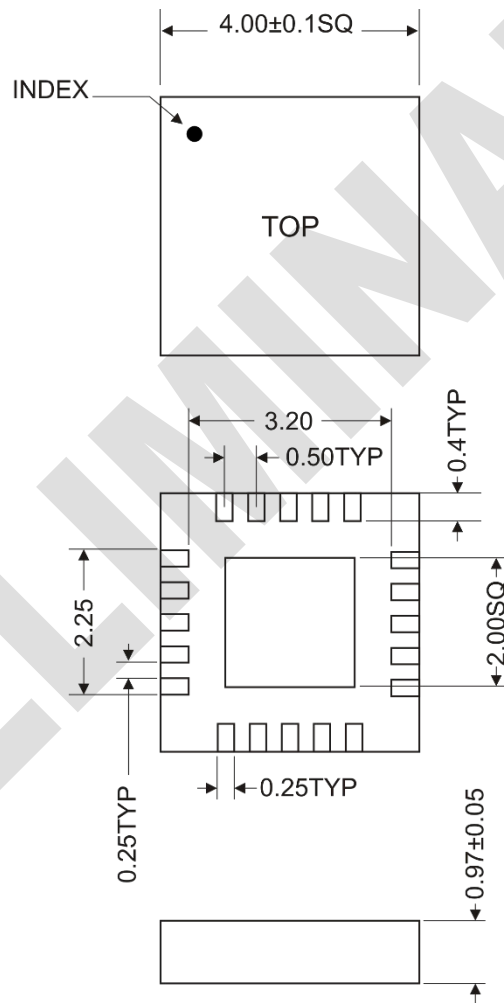


Figure 3 – TAB001-QN package outline, dimensions in mm.