

## [Application Note]

▪ PART Name : BNT02

▪ TEST FREQUENCY : 4500MHz

▪ Main Application Goal : BW 500MHz

▪ Measuring Equipment List

Network Analyzer : N5080A , Signal : N5182A & N5182B, Spectrum Analyzer : N9020A

▪ Test Result :

Frequency	MHz	4250	4500	4700	Mark
Gain	dB	17.6	17.4	17.4	
S11	dB	-24.9	-34.7	-18.6	
S22	dB	-8.4	-9.0	-10.4	
OIP3	dBm	37.3	37.5	35.9	@5dBm/tone
P1	dBm	19.9	20.0	18.6	
NF	dB	1.8	1.9	2.0	
Current	mA		87		5V

Appendix: TEST items available to change depending on the situation.

### \*Application Circuit\_4500MHz

Schematic Diagram	BOM	Marks	
	C1	0603 2pF	
	C2	0603 1pF	
	C3	0603 100pF	
	C4	0603 1uF	
	C5	0603 NA	
	C6	0603 0.5pF	
	C7	0603 0.75F	
	L1	0603 2.7nH	
	R1	0603 NA	
	U1	SOT89 BNT02	

E/B Configuration	Marks
	<p>1. Distance between the center of the shunt cap (C6) and the input pin of BNT02_1.7mm.</p> <p>2. Distance between the center of the shunt cap (C7) and the output pin of BNT02_2.2mm.</p>

[S-parameter]

