

[Application Note]

- Part Name : BBA03
- Test Frequency : 4500MHz
- Main Application Goal : Application Note
- Measuring Equipment List
Network Analyzer : E5071B , Signal : N5182A, Spectrum Analyzer : N9020A
- Test Result :

Frequency	MHz	4000	4500	5000	Remark
Gain	dB	14.1	14.6	14.9	-
S11	dB	-10.5	-12.5	-9.8	Log magnitude
S22	dB	-7.6	-6.7	-5.0	Log magnitude
P1	dBm	19.5	18.8	17.7	-
OIP3	dBm	35.3	34.1	33.1	@ 6dBm/tone, Δf=1 MHz
OIP3	dBm	34.9	34.7	33.0	@ 0dBm/tone, Δf=1 MHz
5G NR ACLR	dBm	8.9	8.1	6.6	3GPP 5G NR, 100MHz BW
NF	dB	2.6	2.7	3.4	-
Current	mA	97			@Vd = 5V

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

*Application Circuit_4500MHz			
Schematic Diagram	BOM		Remark
	C1	0603 22pF	-
	C2	0603 22pF	-
	C3	0603 100pF	-
	C4	0603 1uF	-
	C5	0603 0.3pF	-
	L1	0603 18nH	-
	U1	SOT-89 BBA03	-
E/B Configuration		Remark	
		<ol style="list-style-type: none"> 1. Distance between the edge of the series cap(C1) and the input pin of BBA03 11.80mm. 2. Distance between the edge of the series cap(C2) and the output pin of BBA03 11.20mm. 3. Distance between the edge of the shunt cap(C5) and the input pin of BBA03 1.67mm. 	

[S-parameter]

