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[Classification] Application Note

[Date] 2022.06

[Revision No.] Rev.1.1

[Measuring Instruments]

- NA_Agilent E5071B
- SA_Agilent N9020A
- SG_Agilent 4438C
- SG_Agilent N5182A

High Power Amp BMT321

Application Note

Contents

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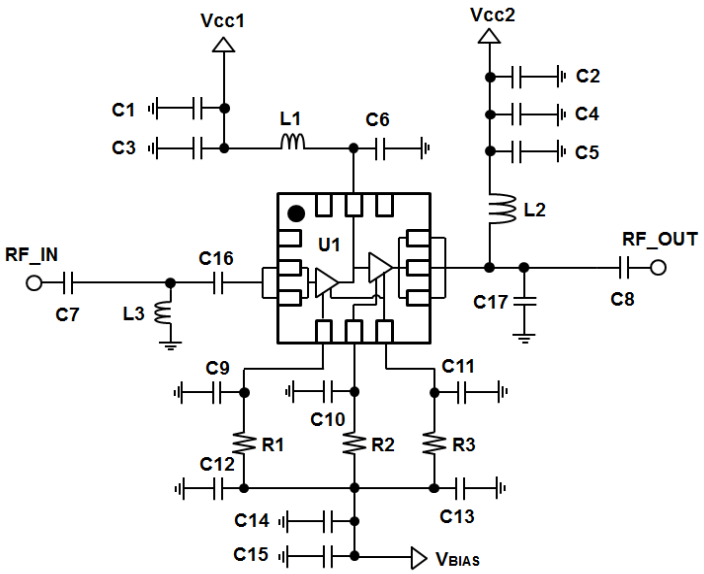
1. BMT321 _ 1805~1880MHz Application Note

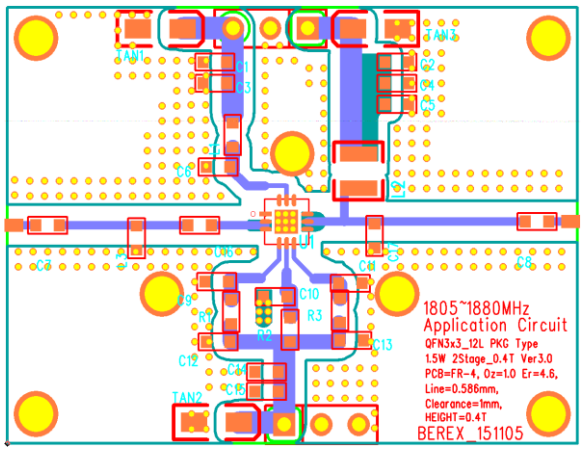
Schematic Diagram



BOM

			Marks
C1	0603	1uF	
C2	0603	1uF	
C3	0603	22pF	
C4	0603	22pF	
C5	0603	N/A	
C6	0603	N/A	
C7	0603	5pF	
C8	0603	22pF	
C9	0603	N/A	
C10	0603	2pF	
C11	0603	N/A	
C12	0603	N/A	
C13	0603	N/A	
C14	0603	1uF	
C15	0603	22pF	
C16	0603	1.2pF	
C17	0603	2.7pF	
L1	0603	18nH	
L2	1008	22nH	Coil
L3	0603	22nH	
R1	0603	300 Ω	±5%
R2	0603	420 Ω	±5%
R3	0603	82 Ω	±5%

PCB Diagram



Notice

Below information is subject to change as conditions of the substrate.

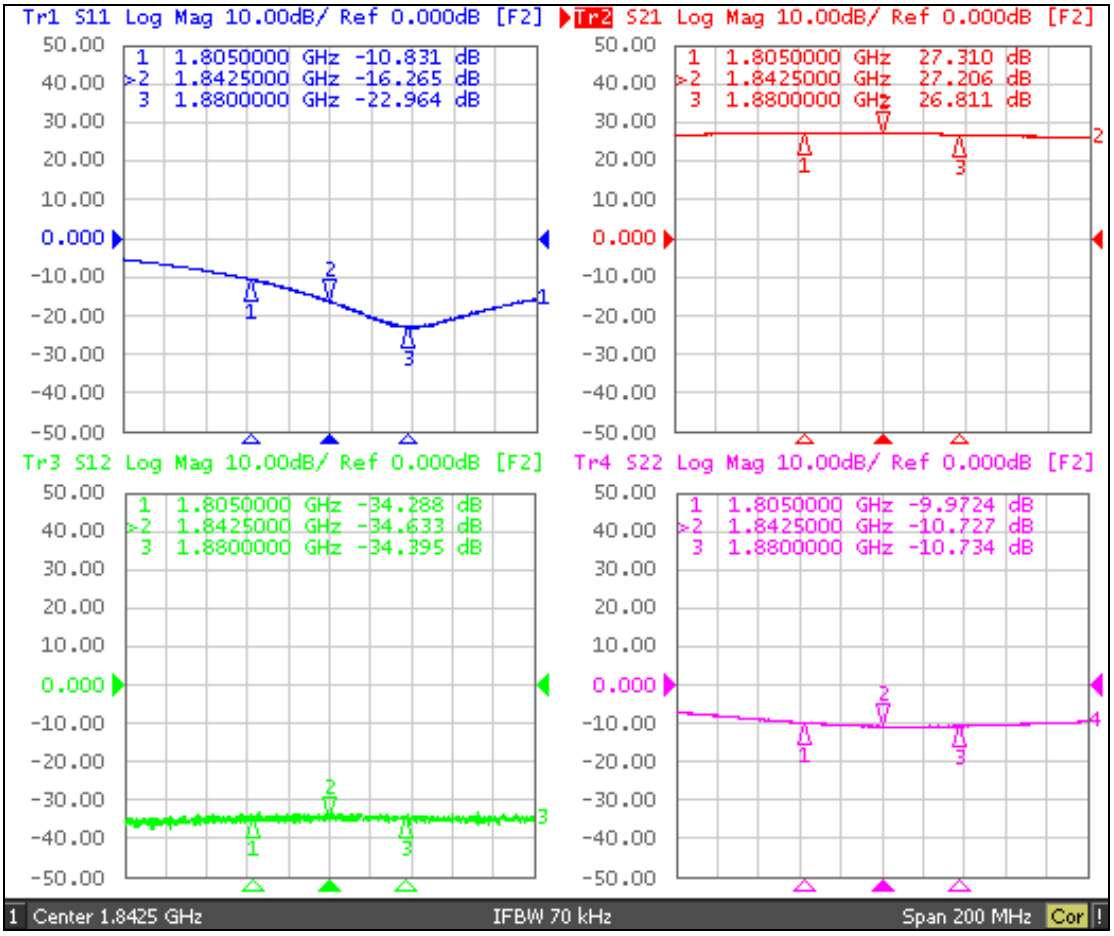
Reference	Object	Distance
Input pin	L3	7.9mm
Input pin	C16	3.5mm
Output pin	C17	3.9mm
Pin 5	C10	3.1mm

1. We recommend to adjust capacitance of C10, when balance for multicarrier response of LTE20MHz is broken .

1.1 BMT321 _ 1805~1880MHz Test Result

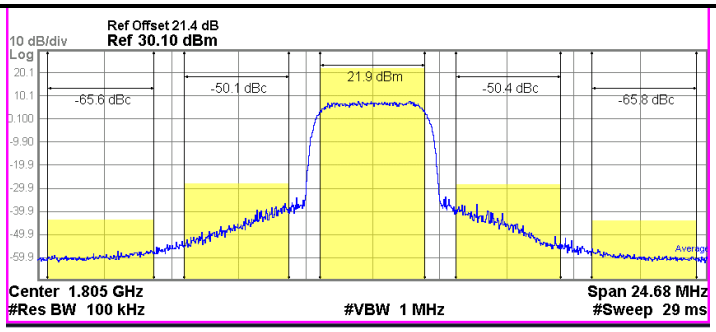
Freq [MHz]	Vcc [V]	Iref [mA]	Icq [mA]	Gain [dB]	OIP3 [dBm](1)	P1dB [dBm]	IRL [dB]	ORL [dB]	NF [dB]
1805	5	26	359	27.3	43.8	31.0	-10.8	-9.9	-
1842.5	5	26	359	27.2	43.8	31.2	-16.2	-10.7	-
1880	5	26	359	26.8	43.5	32.0	-22.9	-10.7	-

(1) OIP3 was tested @Pout=17dBm/tone (CW) 1MHz offset



1.2 BMT321_1805~1880MHz WCDMA 1FA ACLR Test Result

1805MHz 3GPP WCDMA TM1 +64DPCH 1FA

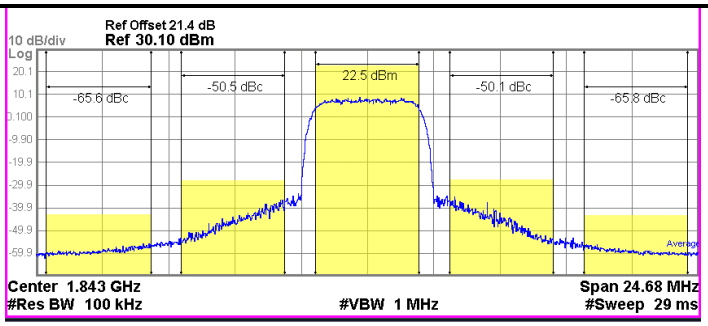


Total Carrier Power 21.857 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	21.857 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.14	-28.29	-50.37	-28.51	ON
10.00 MHz	3.840 MHz	-65.64	-43.79	-65.82	-43.96	ON

1842.5MHz 3GPP WCDMA TM1 +64DPCH 1FA

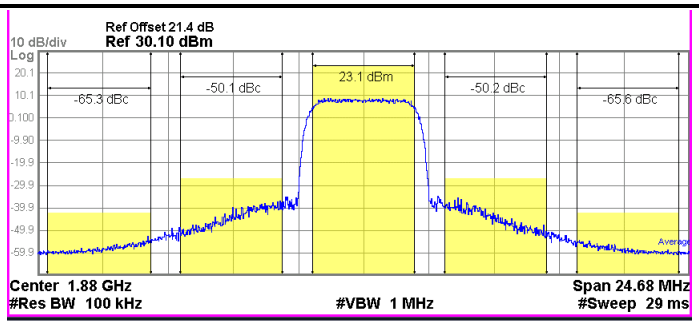


Total Carrier Power 22.453 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	22.453 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.49	-28.03	-50.05	-27.60	ON
10.00 MHz	3.840 MHz	-65.57	-43.12	-65.76	-43.30	ON

1880MHz 3GPP WCDMA TM1 +64DPCH 1FA



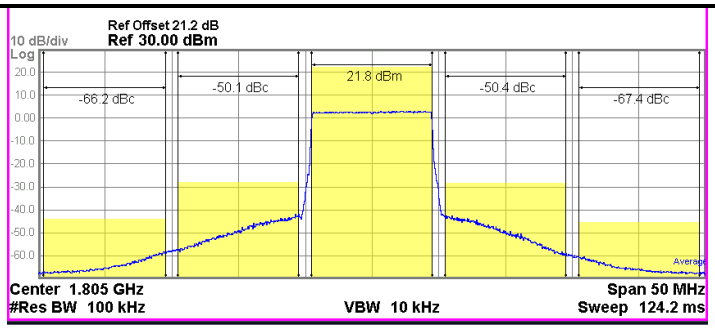
Total Carrier Power 23.131 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.131 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.09	-26.96	-50.15	-27.02	ON
10.00 MHz	3.840 MHz	-65.29	-42.16	-65.65	-42.52	ON

1.3 BMT321_1805~1880MHz LTE10MHz ACLR Test Result

1805MHz 3GPP LTE E-TM3.1 10MHz

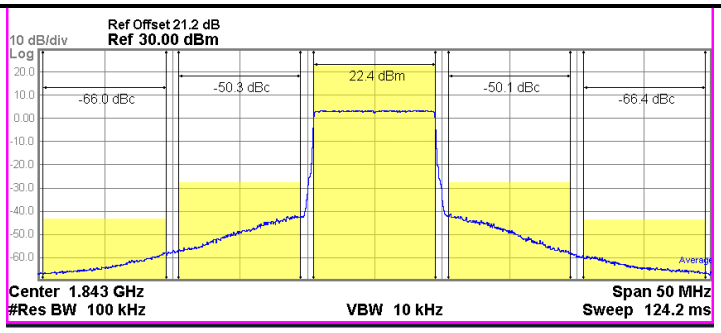


Total Carrier Power 21.816 dBm/ 9.00 MHz ACP-IBW

Carrier Power		Filter
1	21.816 dBm / 9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.13	-28.32	-50.38	-28.56	OFF
20.00 MHz	9.000 MHz	-66.18	-44.36	-67.42	-45.61	OFF

1842.5MHz 3GPP LTE E-TM3.1 10MHz

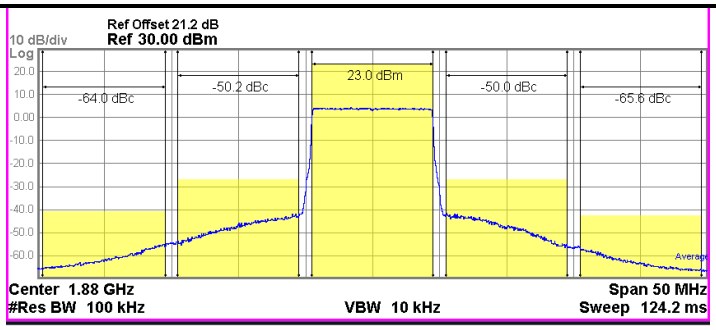


Total Carrier Power 22.356 dBm/ 9.00 MHz ACP-IBW

Carrier Power		Filter
1	22.356 dBm / 9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.26	-27.91	-50.08	-27.72	OFF
20.00 MHz	9.000 MHz	-65.98	-43.63	-66.36	-44.00	OFF

1880MHz 3GPP LTE E-TM3.1 10MHz



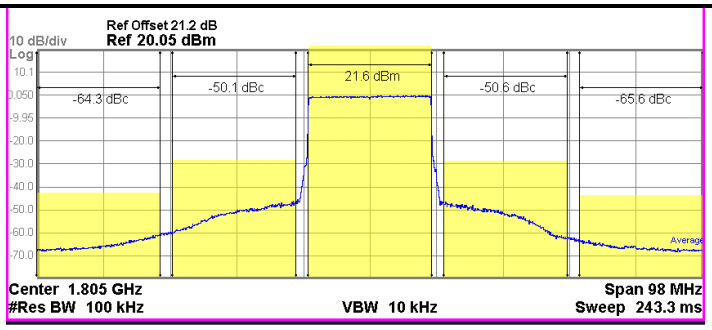
Total Carrier Power 23.033 dBm/ 9.00 MHz ACP-IBW

Carrier Power		Filter
1	23.033 dBm / 9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.21	-27.18	-50.04	-27.01	OFF
20.00 MHz	9.000 MHz	-64.03	-41.00	-65.64	-42.60	OFF

1.4 BMT321_1805~1880MHz LTE20MHz ACLR Test Result

1805MHz 3GPP LTE E-TM3.1 20MHz

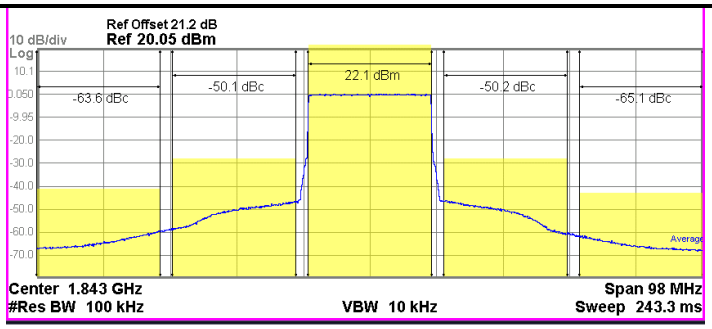


Total Carrier Power 21.622 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	21.622 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.07	-28.45	-50.63	-29.01	OFF
40.00 MHz	18.00 MHz	-64.31	-42.69	-65.58	-43.96	OFF

1842.5MHz 3GPP LTE E-TM3.1 20MHz

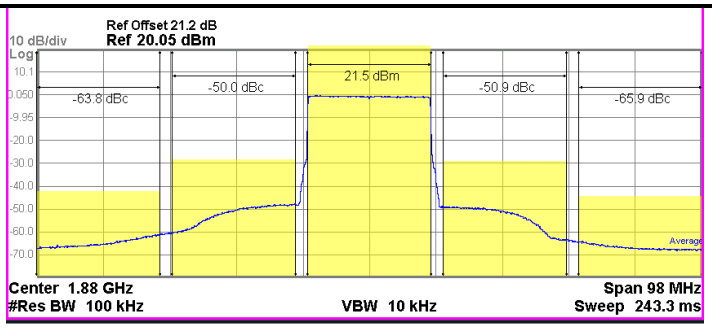


Total Carrier Power 22.110 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	22.110 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.11	-28.01	-50.20	-28.09	OFF
40.00 MHz	18.00 MHz	-63.58	-41.47	-65.10	-42.99	OFF

1880MHz 3GPP LTE E-TM3.1 20MHz



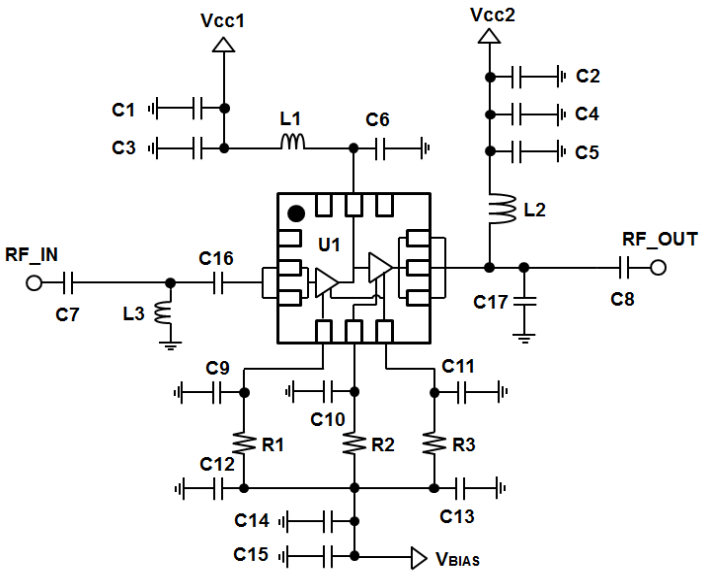
Total Carrier Power 21.542 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	21.542 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.03	-28.49	-50.92	-29.38	OFF
40.00 MHz	18.00 MHz	-63.78	-42.24	-65.91	-44.36	OFF

2. BMT321_1930~1990MHz Application Note

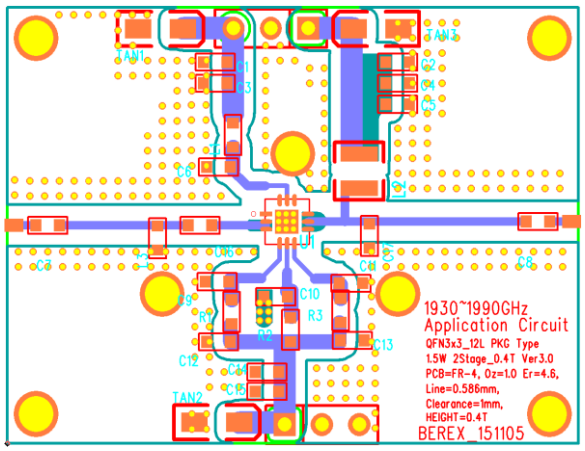
Schematic Diagram



BOM

			Marks
C1	0603	1uF	
C2	0603	1uF	
C3	0603	22pF	
C4	0603	22pF	
C5	0603	N/A	
C6	0603	N/A	
C7	0603	5pF	
C8	0603	22pF	
C9	0603	N/A	
C10	0603	1.5pF	
C11	0603	N/A	
C12	0603	N/A	
C13	0603	N/A	
C14	0603	1uF	
C15	0603	22pF	
C16	0603	1.2pF	
C17	0603	2.5pF	
L1	0603	12nH	
L2	1008	22nH	Coil
L3	0603	22nH	
R1	0603	300 Ω	±5%
R2	0603	420 Ω	±5%
R3	0603	82 Ω	±5%

PCB Diagram



Notice

Below information is subject to change as conditions of the substrate.

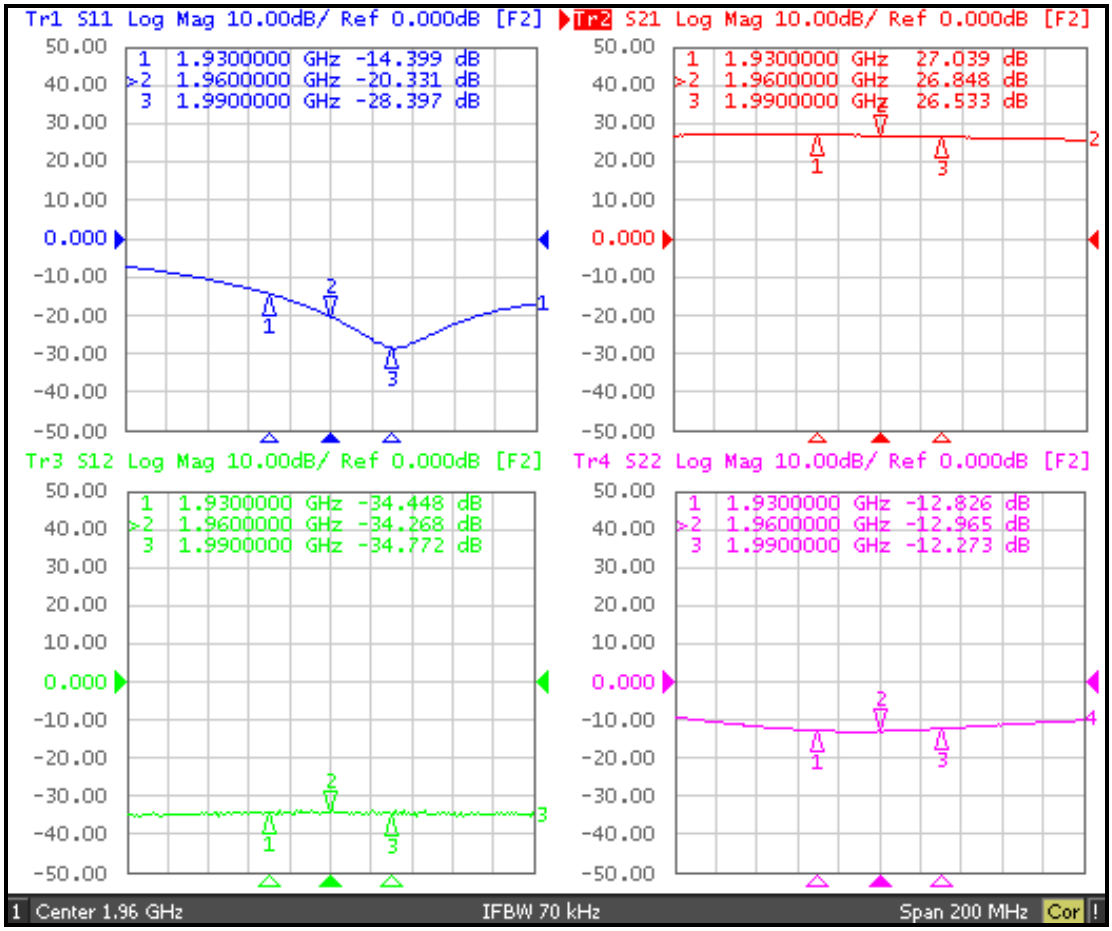
Reference	Object	Distance
Input pin	L3	6.8mm
Input pin	C16	3.5mm
Output pin	C17	3.5mm
Pin 5	C10	3.1mm

1. We recommend to adjust capacitance of C10, when balance for multicarrier response of LTE20MHz is broken .

2.1 BMT321_1930~1990MHz Test Result

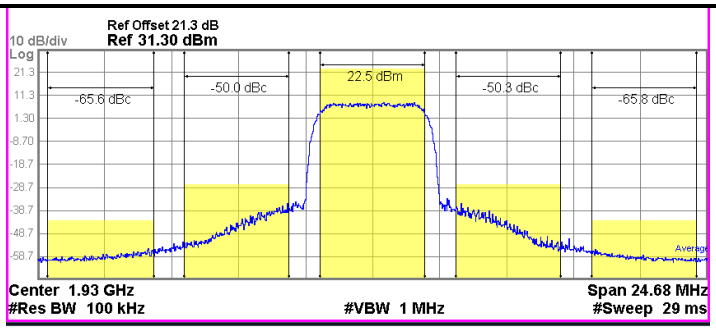
Freq [MHz]	Vcc [V]	Iref [mA]	Icq [mA]	Gain [dB]	OIP3 [dBm](1)	P1dB [dBm]	IRL [dB]	ORL [dB]	NF [dB]
1930	5	26	355	27.0	43.0	31.2	-14.4	-12.8	-
1960	5	26	355	26.8	43.7	32.0	-20.3	-12.9	-
1990	5	26	355	26.5	46.4	32.1	-28.4	-12.2	-

(1) OIP3 was tested @Pout=17dBm/tone (CW) 1MHz offset



2.2 BMT321_1930~1990MHz WCDMA 1FA ACLR Test Result

1930MHz 3GPP WCDMA TM1 +64DPCH 1FA

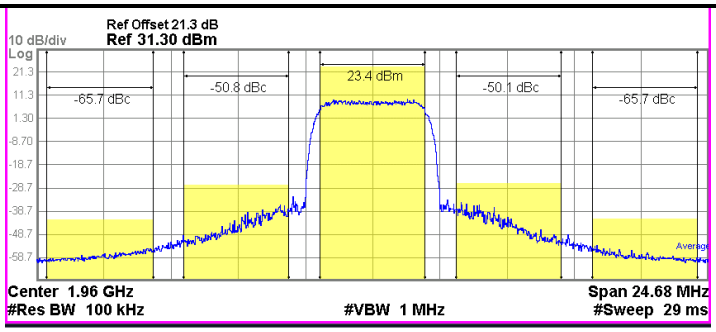


Total Carrier Power 22.466 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	22.466 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.00	-27.53	-50.26	-27.79	ON
10.00 MHz	3.840 MHz	-65.59	-43.13	-65.84	-43.37	ON

1960MHz 3GPP WCDMA TM1 +64DPCH 1FA

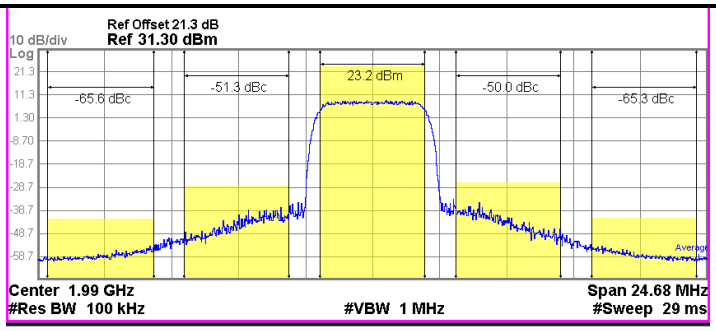


Total Carrier Power 23.423 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.423 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.78	-27.36	-50.09	-26.67	ON
10.00 MHz	3.840 MHz	-65.73	-42.31	-65.73	-42.30	ON

1990MHz 3GPP WCDMA TM1 +64DPCH 1FA



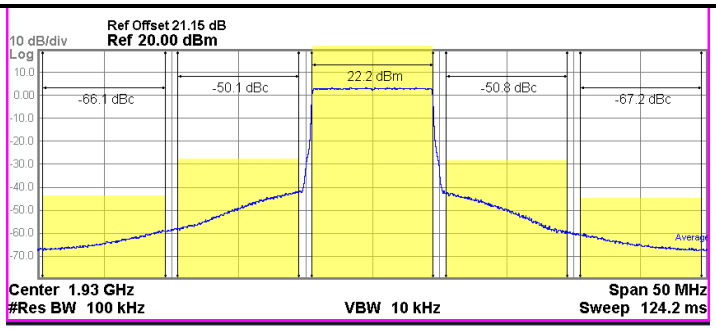
Total Carrier Power 23.173 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.173 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-51.30	-28.12	-50.03	-26.86	ON
10.00 MHz	3.840 MHz	-65.63	-42.46	-65.31	-42.13	ON

2.3 BMT321_1930~1990MHz LTE10MHz ACLR Test Result

1930MHz 3GPP LTE E-TM3.1 10MHz

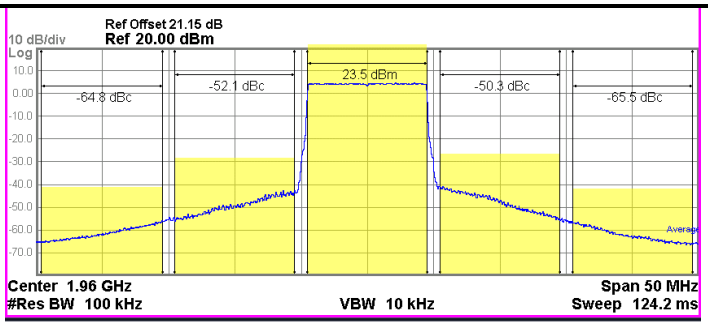


Total Carrier Power 22.159 dBm/ 9.00 MHz ACP-IBW

Carrier Power			Filter
1	22.159 dBm /	9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.07	-27.91	-50.77	-28.61	OFF
20.00 MHz	9.000 MHz	-66.07	-43.91	-67.18	-45.02	OFF

1960MHz 3GPP LTE E-TM3.1 10MHz

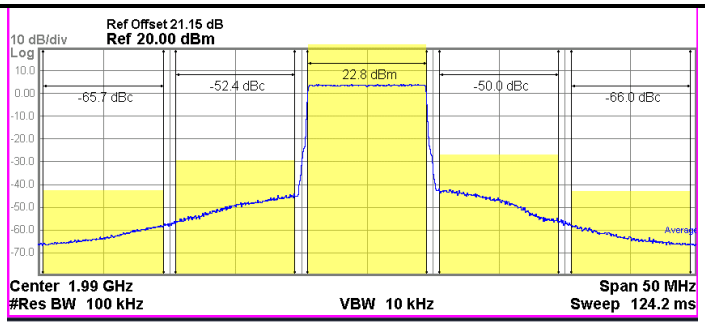


Total Carrier Power 23.463 dBm/ 9.00 MHz ACP-IBW

Carrier Power			Filter
1	23.463 dBm /	9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-52.07	-28.60	-50.26	-26.80	OFF
20.00 MHz	9.000 MHz	-64.81	-41.35	-65.46	-42.00	OFF

1990MHz 3GPP LTE E-TM3.1 10MHz



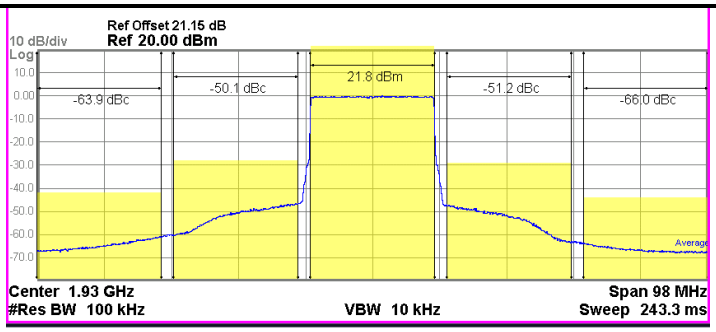
Total Carrier Power 22.846 dBm/ 9.00 MHz ACP-IBW

Carrier Power			Filter
1	22.846 dBm /	9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-52.39	-29.55	-50.04	-27.20	OFF
20.00 MHz	9.000 MHz	-65.71	-42.87	-65.98	-43.13	OFF

2.4 BMT321_1930~1990MHz LTE20MHz ACLR Test Result

1930MHz 3GPP LTE E-TM3.1 20MHz

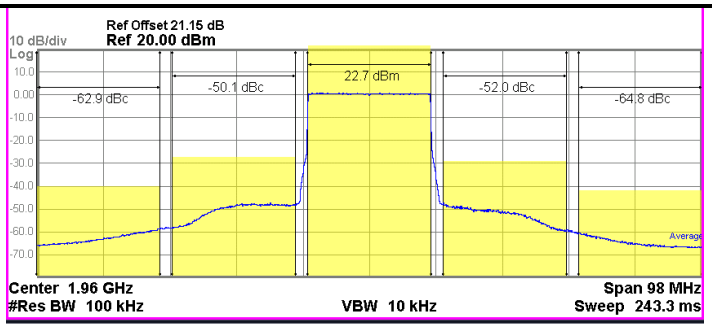


Total Carrier Power 21.815 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	21.815 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.06	-28.24	-51.23	-29.42	OFF
40.00 MHz	18.00 MHz	-63.90	-42.08	-65.96	-44.14	OFF

1960MHz 3GPP LTE E-TM3.1 20MHz

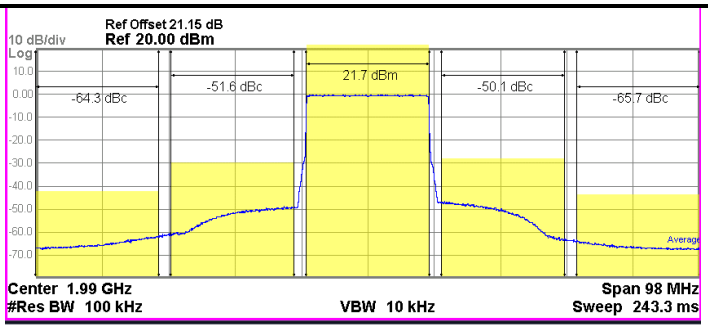


Total Carrier Power 22.724 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	22.724 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.10	-27.37	-52.03	-29.30	OFF
40.00 MHz	18.00 MHz	-62.91	-40.19	-64.82	-42.09	OFF

1990MHz 3GPP LTE E-TM3.1 20MHz



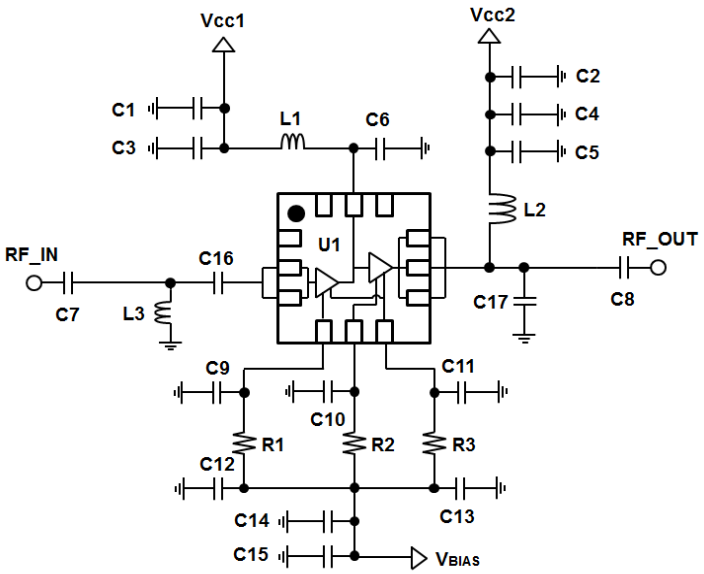
Total Carrier Power 21.707 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	21.707 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-51.56	-29.85	-50.05	-28.34	OFF
40.00 MHz	18.00 MHz	-64.31	-42.60	-65.71	-44.00	OFF

3. BMT321 2110~2170MHz Application Note

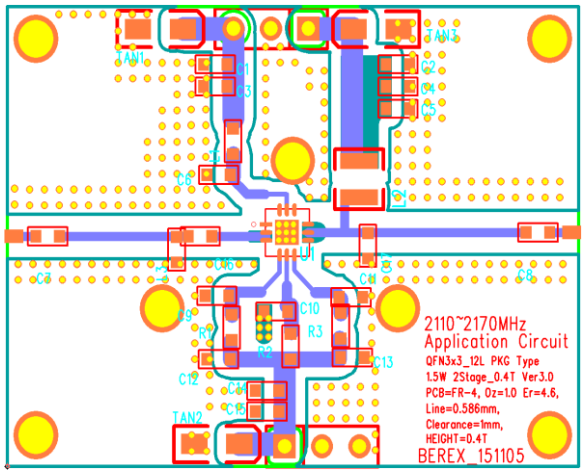
Schematic Diagram



BOM

			Marks
C1	0603	1uF	
C2	0603	1uF	
C3	0603	22pF	
C4	0603	22pF	
C5	0603	N/A	
C6	0603	N/A	
C7	0603	5pF	
C8	0603	22pF	
C9	0603	N/A	
C10	0603	1.2pF	
C11	0603	N/A	
C12	0603	N/A	
C13	0603	N/A	
C14	0603	1uF	
C15	0603	22pF	
C16	0603	1.2pF	
C17	0603	2.2pF	
L1	0603	33nH	
L2	1008	18nH	Coil
L3	0603	2.2nH	
R1	0603	300 Ω	±5%
R2	0603	420 Ω	±5%
R3	0603	82 Ω	±5%

PCB Diagram



Notice

Below information is subject to change as conditions of the substrate.

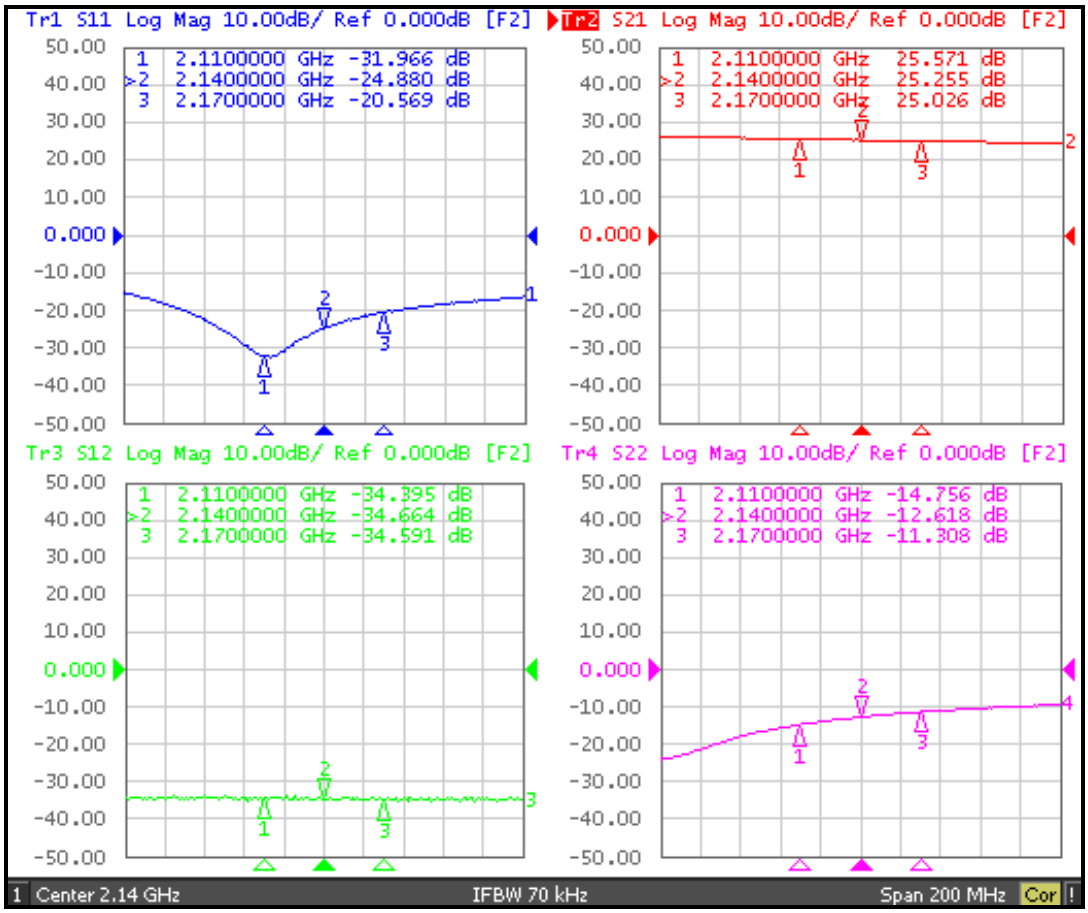
Reference	Object	Distance
Input pin	L3	5.5mm
Input pin	C16	3.5mm
Output pin	C17	3.4mm
Pin 5	C10	3.1mm

1. We recommend to adjust capacitance of C10, when balance for multicarrier response of LTE20MHz is broken .

3.1 BMT321 2110~2170MHz Test Result

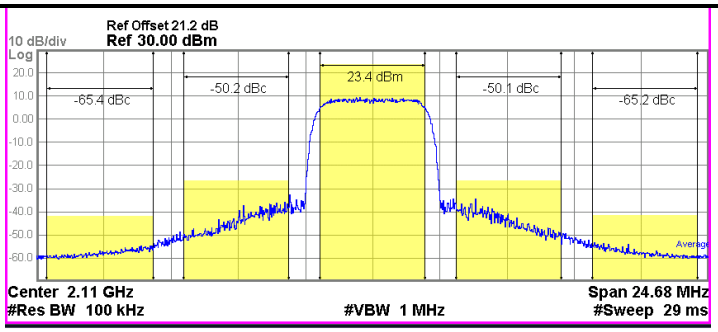
Freq [MHz]	Vcc [V]	Iref [mA]	Icq [mA]	Gain [dB]	OIP3 [dBm](1)	P1dB [dBm]	IRL [dB]	ORL [dB]	NF [dB]
2110	5	26	357	25.5	45.0	31.7	-31.9	-14.7	-
2140	5	26	357	25.2	48.6	32.2	-24.8	-12.6	-
2170	5	26	357	25.0	48.6	32.0	-20.5	-11.3	-

(1) OIP3 was tested @Pout=17dBm/tone (CW) 1MHz offset



3.2 BMT321_2110~2170MHz WCDMA 1FA ACLR Test Result

2110MHz 3GPP WCDMA TM1 +64DPCH 1FA

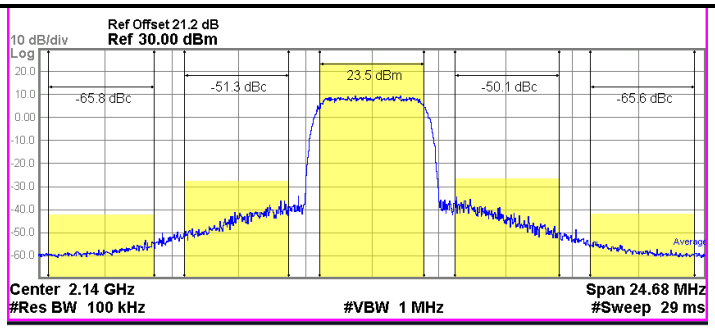


Total Carrier Power 23.410 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.410 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.17	-26.76	-50.13	-26.72	ON
10.00 MHz	3.840 MHz	-65.42	-42.01	-65.18	-41.77	ON

2140MHz 3GPP WCDMA TM1 +64DPCH 1FA

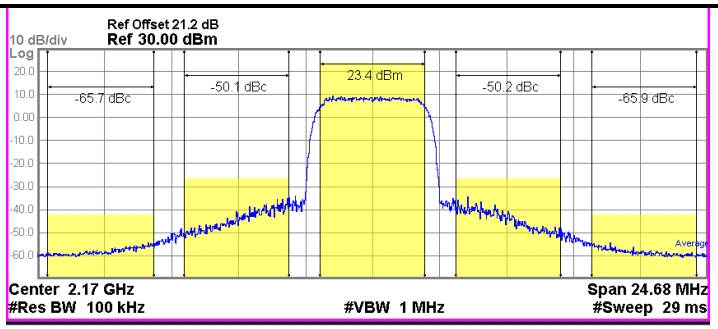


Total Carrier Power 23.473 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.473 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-51.29	-27.81	-50.14	-26.67	ON
10.00 MHz	3.840 MHz	-65.83	-42.35	-65.64	-42.16	ON

2170MHz 3GPP WCDMA TM1 +64DPCH 1FA



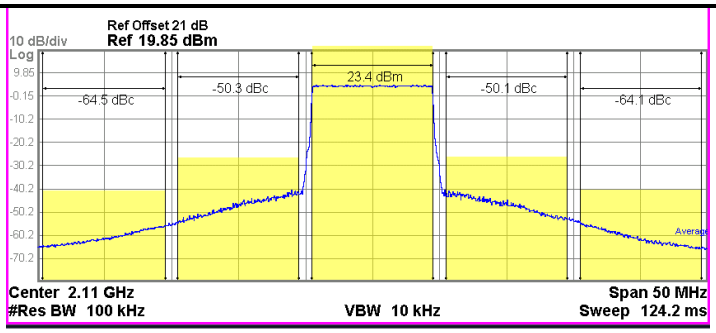
Total Carrier Power 23.369 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.369 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.15	-26.78	-50.17	-26.80	ON
10.00 MHz	3.840 MHz	-65.67	-42.30	-65.93	-42.56	ON

3.3 BMT321_2110~2170MHz LTE10MHz ACLR Test Result

2110MHz 3GPP LTE E-TM3.1 10MHz

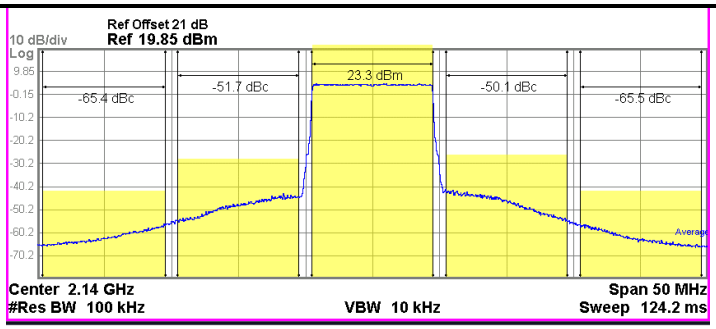


Total Carrier Power 23.435 dBm/ 9.00 MHz ACP-IBW

Carrier Power		Filter
1	23.435 dBm / 9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.34	-26.90	-50.05	-26.62	OFF
20.00 MHz	9.000 MHz	-64.45	-41.02	-64.14	-40.71	OFF

2140MHz 3GPP LTE E-TM3.1 10MHz

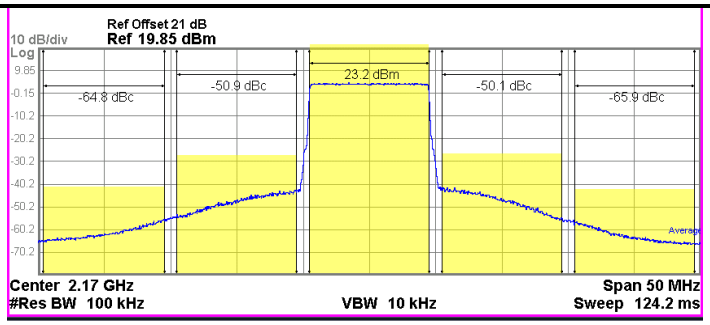


Total Carrier Power 23.328 dBm/ 9.00 MHz ACP-IBW

Carrier Power		Filter
1	23.328 dBm / 9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-51.69	-28.36	-50.08	-26.75	OFF
20.00 MHz	9.000 MHz	-65.42	-42.09	-65.52	-42.20	OFF

2170MHz 3GPP LTE E-TM3.1 10MHz



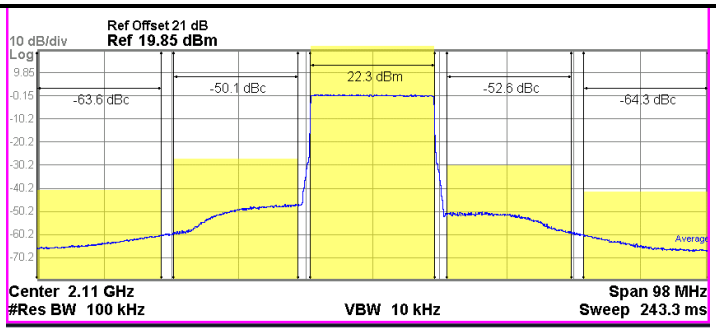
Total Carrier Power 23.170 dBm/ 9.00 MHz ACP-IBW

Carrier Power		Filter
1	23.170 dBm / 9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.87	-27.70	-50.06	-26.89	OFF
20.00 MHz	9.000 MHz	-64.79	-41.62	-65.86	-42.68	OFF

3.4 BMT321_2110~2170MHz LTE20MHz ACLR Test Result

2110MHz 3GPP LTE E-TM3.1 20MHz



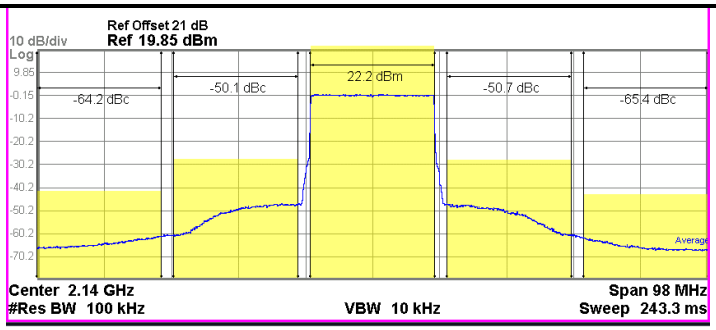
Total Carrier Power 22.272 dBm/ 18.00 MHz

Carrier Power			Filter
1	22.272 dBm /	18.00 MHz	OFF

ACP-IBW

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.09	-27.82	-52.63	-30.36	OFF
40.00 MHz	18.00 MHz	-63.60	-41.33	-64.34	-42.07	OFF

2140MHz 3GPP LTE E-TM3.1 20MHz



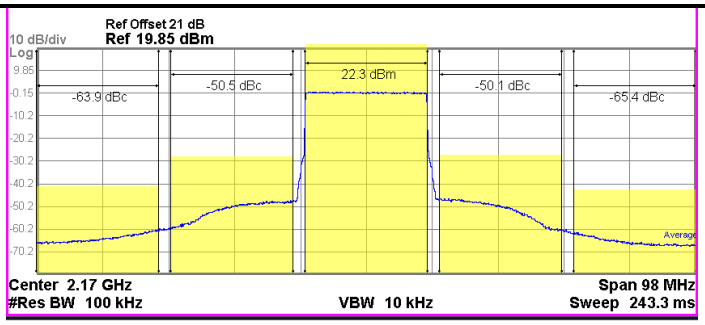
Total Carrier Power 22.208 dBm/ 18.00 MHz

Carrier Power			Filter
1	22.208 dBm /	18.00 MHz	OFF

ACP-IBW

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.06	-27.85	-50.67	-28.46	OFF
40.00 MHz	18.00 MHz	-64.18	-41.97	-65.41	-43.20	OFF

2170MHz 3GPP LTE E-TM3.1 20MHz



Total Carrier Power 22.268 dBm/ 18.00 MHz

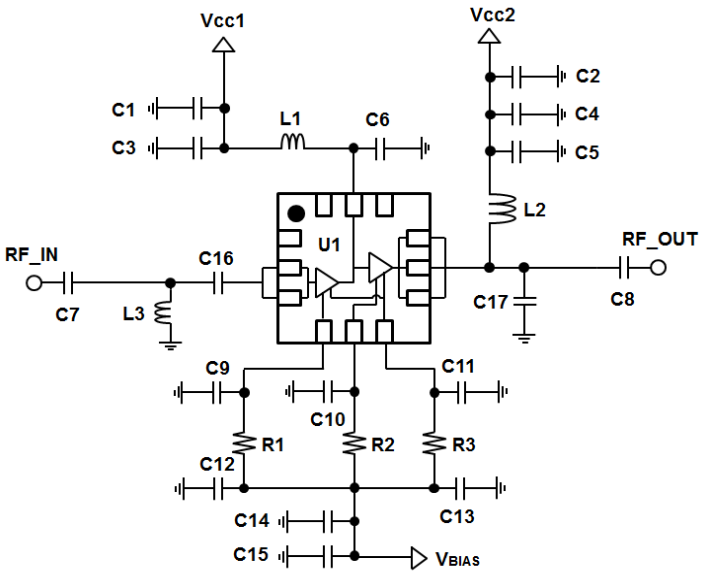
Carrier Power			Filter
1	22.268 dBm /	18.00 MHz	OFF

ACP-IBW

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.55	-28.28	-50.07	-27.81	OFF
40.00 MHz	18.00 MHz	-63.94	-41.67	-65.39	-43.12	OFF

4. BMT321 2620~2690MHz Application Note

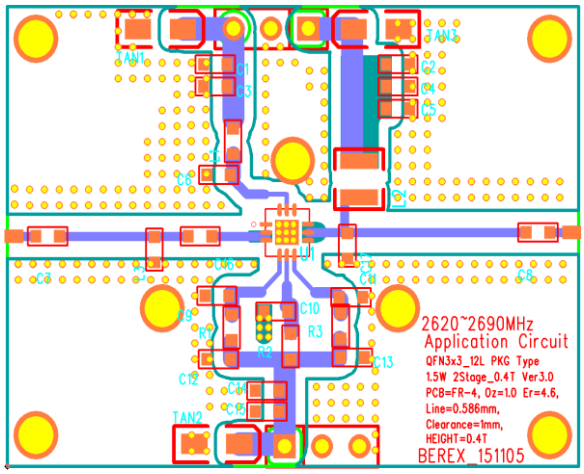
Schematic Diagram



BOM

			Marks
C1	0603	1uF	
C2	0603	1uF	
C3	0603	22pF	
C4	0603	22pF	
C5	0603	N/A	
C6	0603	N/A	
C7	0603	5pF	
C8	0603	22pF	
C9	0603	N/A	
C10	0603	N/A	
C11	0603	N/A	
C12	0603	N/A	
C13	0603	N/A	
C14	0603	1uF	
C15	0603	22pF	
C16	0603	0.75pF	
C17	0603	1.5pF	
L1	0603	27nH	
L2	1008	18nH	Coil
L3	0603	1.8nH	
R1	0603	300 Ω	±5%
R2	0603	420 Ω	±5%
R3	0603	82 Ω	±5%

PCB Diagram



Notice

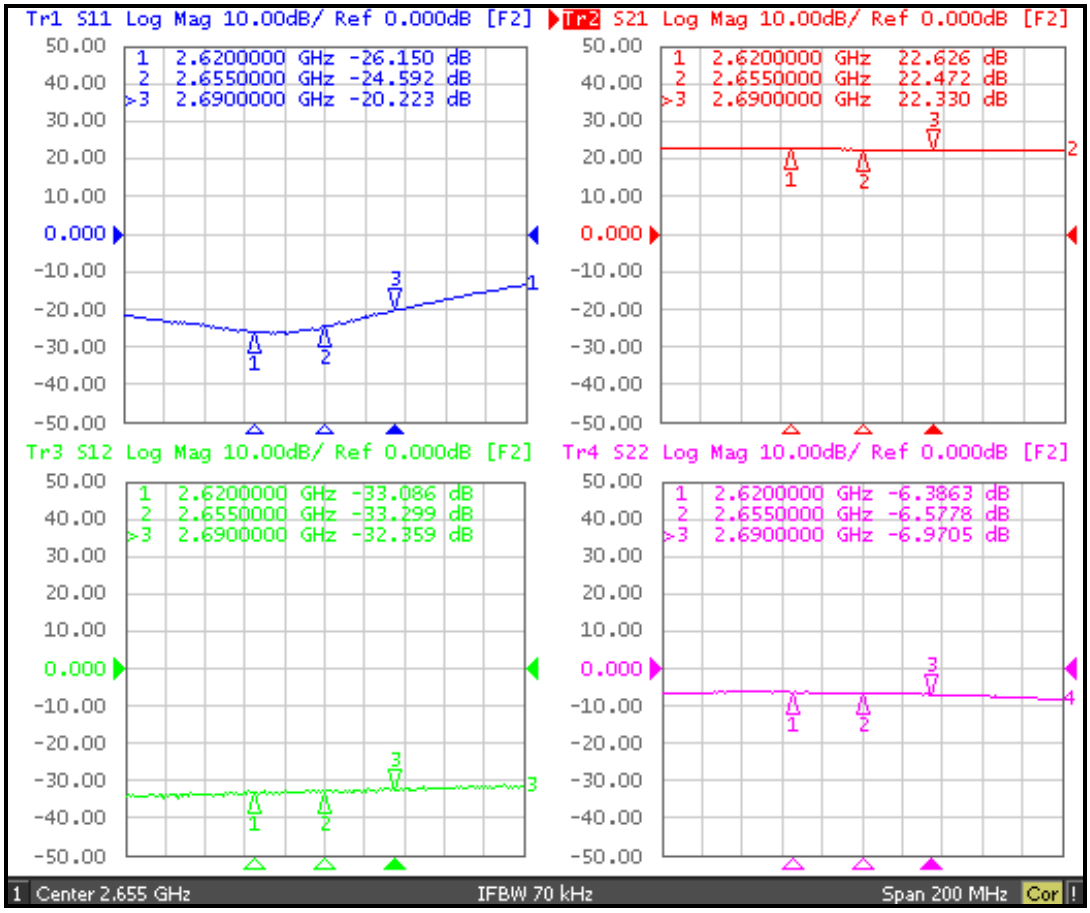
Below information is subject to change as conditions of the substrate.

Reference	Object	Distance
Input pin	L3	7.1mm
Input pin	C16	3.5mm
Output pin	C17	3.5mm
Pin 5	C10	2.7mm

4.1 BMT321 2620~2690MHz Test Result

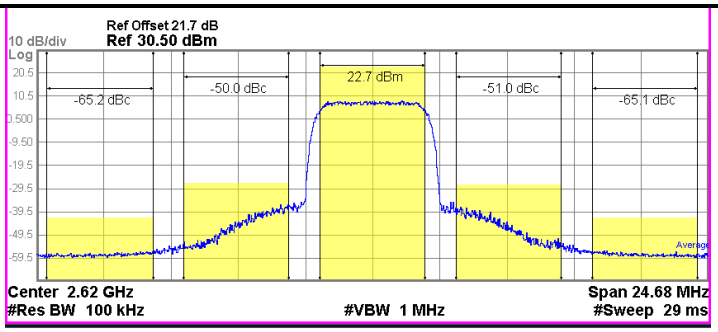
Freq [MHz]	Vcc [V]	Iref [mA]	Icq [mA]	Gain [dB]	OIP3 [dBm](1)	P1dB [dBm]	IRL [dB]	ORL [dB]	NF [dB]
2620	5	26	360	22.6	45.1	31.3	-26.1	-6.3	-
2655	5	26	360	22.4	46.3	31.5	-24.5	-6.5	-
2690	5	26	360	22.3	42.6	31.0	-20.2	-6.9	-

(1) OIP3 was tested @Pout=17dBm/tone (CW) 1MHz offset



4.2 BMT321_2620~2690MHz WCDMA 1FA ACLR Test Result

2620MHz 3GPP WCDMA TM1 +64DPCH 1FA

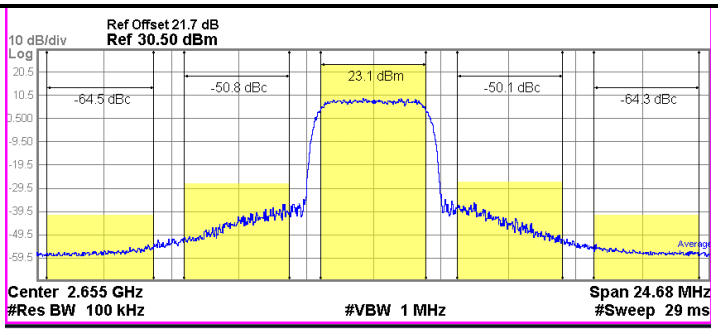


Total Carrier Power 22.736 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	22.736 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.02	-27.28	-51.02	-28.28	ON
10.00 MHz	3.840 MHz	-65.18	-42.44	-65.07	-42.34	ON

2655MHz 3GPP WCDMA TM1 +64DPCH 1FA

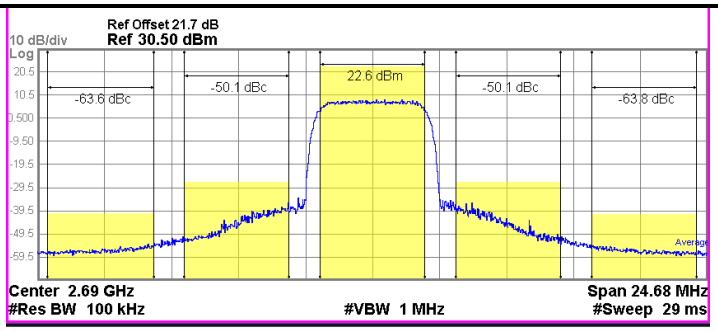


Total Carrier Power 23.118 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	23.118 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.83	-27.71	-50.11	-26.99	ON
10.00 MHz	3.840 MHz	-64.49	-41.37	-64.35	-41.23	ON

2690MHz 3GPP WCDMA TM1 +64DPCH 1FA



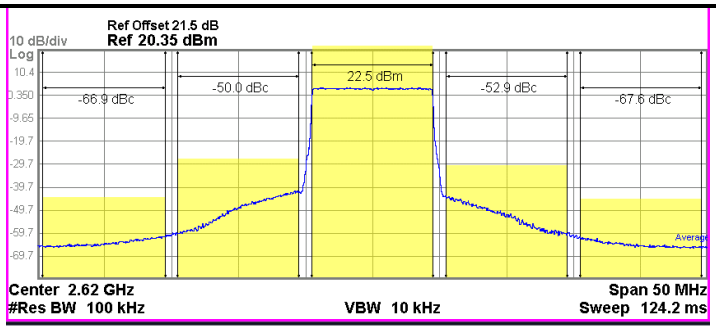
Total Carrier Power 22.622 dBm/ 3.84 MHz ACP-IBW

Carrier Power			Filter
1	22.622 dBm /	3.840 MHz	ON

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
5.000 MHz	3.840 MHz	-50.15	-27.53	-50.09	-27.47	ON
10.00 MHz	3.840 MHz	-63.61	-40.99	-63.80	-41.18	ON

4.3 BMT321_2620~2690MHz LTE10MHz ACLR Test Result

2620MHz 3GPP LTE E-TM3.1 10MHz

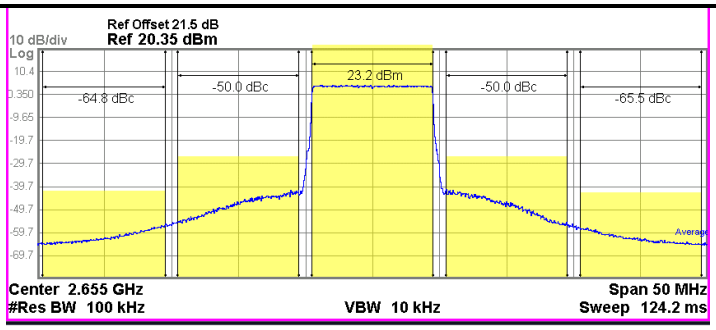


Total Carrier Power 22.507 dBm/ 9.00 MHz ACP-IBW

Carrier Power			Filter
1	22.507 dBm /	9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.03	-27.53	-52.86	-30.35	OFF
20.00 MHz	9.000 MHz	-66.90	-44.40	-67.61	-45.10	OFF

2655MHz 3GPP LTE E-TM3.1 10MHz

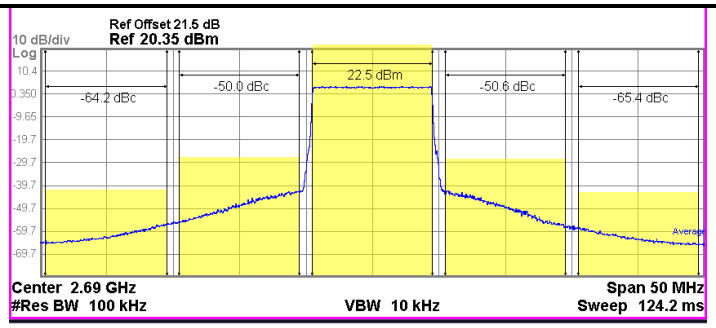


Total Carrier Power 23.185 dBm/ 9.00 MHz ACP-IBW

Carrier Power			Filter
1	23.185 dBm /	9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.02	-26.84	-50.03	-26.84	OFF
20.00 MHz	9.000 MHz	-64.84	-41.65	-65.53	-42.35	OFF

2690MHz 3GPP LTE E-TM3.1 10MHz



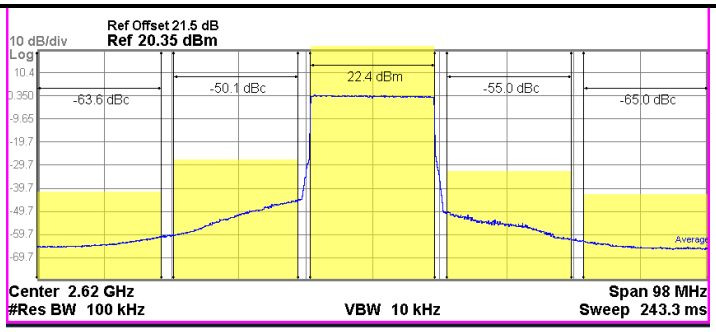
Total Carrier Power 22.516 dBm/ 9.00 MHz ACP-IBW

Carrier Power			Filter
1	22.516 dBm /	9.000 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
10.00 MHz	9.000 MHz	-50.03	-27.52	-50.58	-28.06	OFF
20.00 MHz	9.000 MHz	-64.15	-41.63	-65.35	-42.84	OFF

1.1 BMT321_2620~2690MHz LTE20MHz ACLR Test Result

2620MHz 3GPP LTE E-TM3.1 20MHz

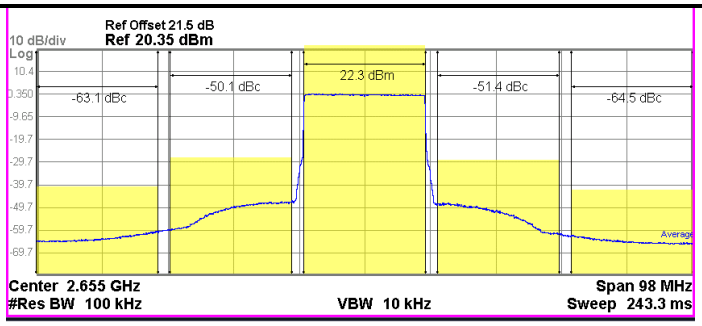


Total Carrier Power 22.419 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	22.419 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.09	-27.67	-54.97	-32.55	OFF
40.00 MHz	18.00 MHz	-63.64	-41.22	-64.96	-42.54	OFF

2655MHz 3GPP LTE E-TM3.1 20MHz

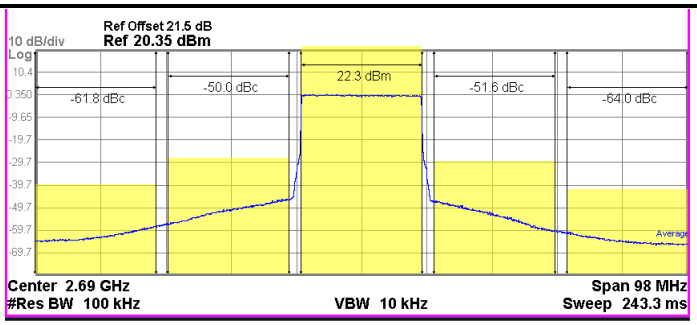


Total Carrier Power 22.305 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	22.305 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.07	-27.77	-51.35	-29.05	OFF
40.00 MHz	18.00 MHz	-63.11	-40.81	-64.46	-42.15	OFF

2690MHz 3GPP LTE E-TM3.1 20MHz



Total Carrier Power 22.286 dBm/ 18.00 MHz ACP-IBW

Carrier Power			Filter
1	22.286 dBm /	18.00 MHz	OFF

Offset Freq	Integ BW	Lower dBc	Lower dBm	Upper dBc	Upper dBm	Filter
20.00 MHz	18.00 MHz	-50.03	-27.74	-51.57	-29.28	OFF
40.00 MHz	18.00 MHz	-61.84	-39.55	-63.96	-41.67	OFF