



SUMMARY DATA On SBA-218-63DB-6B-SFF

Customer: _____
 SO No: _____
 Model No: SBA-218-63DB-6B-SFF
 Serial No: PL35113/2150 - DEMO

Tested By: A. Lopez
 Temperature: +25°C
 Date: 12/16/2021
 Drawing No: 27639900 Rev: E1

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	Test Results	QA
			+25°C	QC
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz	PMI QA 2
2	Insertion Loss:	7 dB Max.(2 To 8 GHz) 8.5 dB Max.(8 To 12 GHz) 9.5 dB Max.(12 To 16 GHz) 10.5dB Max.(16 To 18 GHz)	6.58 dB	
			7.84 dB	
			8.71 dB	
			9.35 dB	
			See Graphs	
3	Attenuation Range (Over IL):	0 To 63 dB	Pass See Graphs	
4	Nominal Attenuation Res:	1 dB	Pass	
5	Actual Attenuation Res:	1 +/-0.2dB Goal	Pass	
6	Monotonicity:	Guaranteed	Pass	
7	Riple And Slope	2dB Typ (0 to 31 dB Atte) 4dB Typ. (31 To 63 dB Atte) 2 To 18 GHz, Over Temp 0.6dB Typ (0 To 31 dB Atte) 1.2 dB Typ (31 To 63 dB Atte) Over Any 1 GHz, Over Temp	0.19 dB Max/-0.26 dB Min	
			1.27 dB Max/-1.32 dB Min	
			See Graphs	
			0.1 dB Max/-0.26 dB Min	
			0.99 dB Max/-1.32 dB Min	
			See Graphs	
8	Harmonics:	-38dBc Max @ 18dBm Input -40dBc Max @ 15dBm Input -45dBc Max @ 12 dBm Input	-60.07 dBc	
			-62.93 dBc	
			-64.93 dBc	
			See Plots	
9	Switching Speed:	80ns Max	Rise Time - 24.10 ns	
			Fall Time - 3.90 ns	
			Speed ON - 78.00 ns	
			Speed OFF - 12.40 ns	
			See Plots	
10	Switching Rate:	1 MHz Min	Pass	
11	VSWR (In/Out)	1.9:1 Max	1.73 :1 All The Attenuation steps	
12	Input Power:	+25dBm CW Max.	Pass	
13	Video Leakage:	-55dBm Max, 1 To 18 GHz (Measured with Spectrum Analyzer set to RF Video BW Resolution: 3MHz)	> to -55 dBm See Plot	
14	DC Voltage:	+5VDC +/-5% @ 200 mA Max -12VDC +/-5% @ 300mA Max	+5VDC @ 20 mA -12VDC @ 20 mA	
15	TTL Control:	6 Bits "1 = Insertion Loss" "0 = Attenuation"	Pass	PMI QA 2

QA/QC Approval: _____

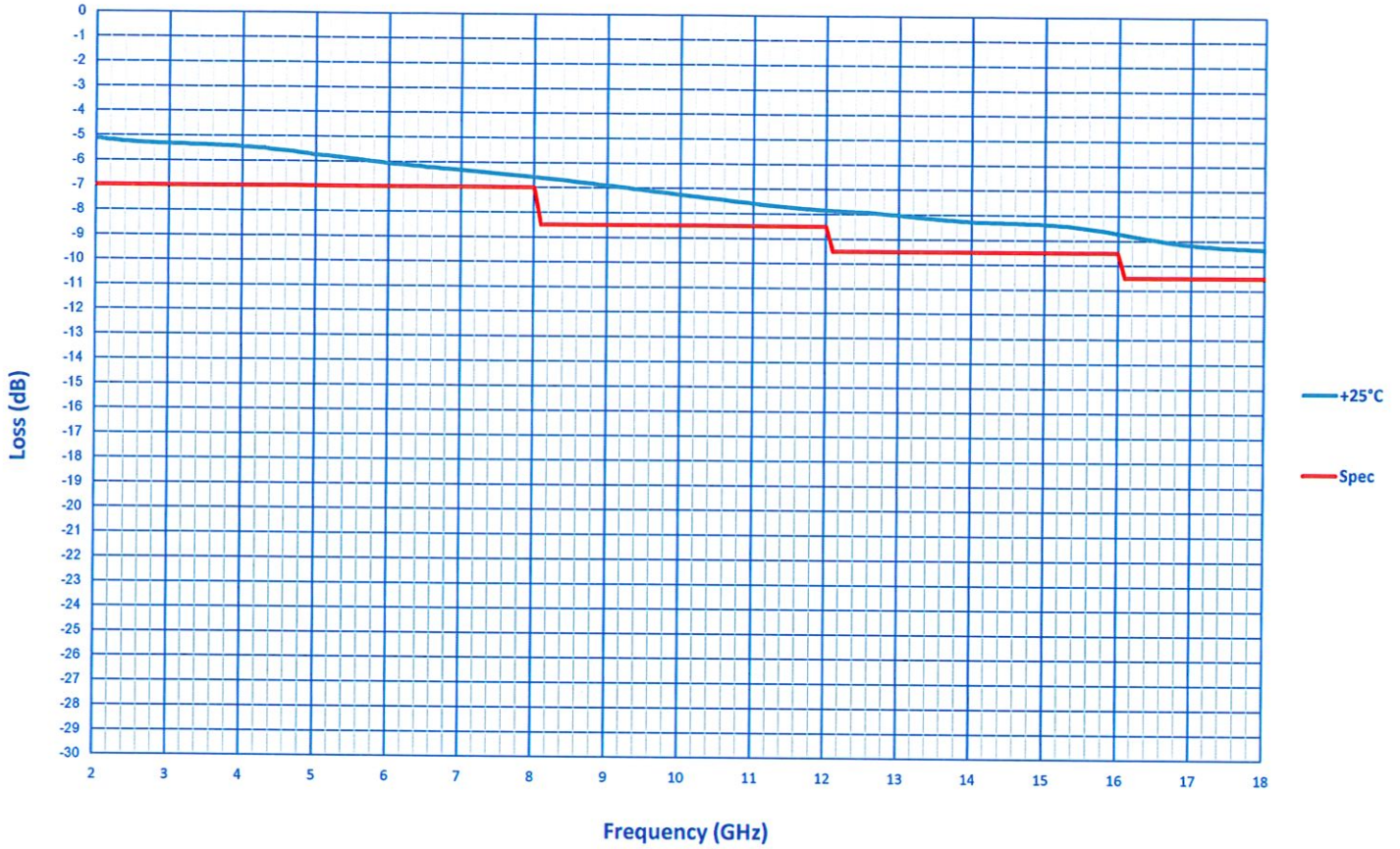
PMI
QA 2

Date: 12/16/2021

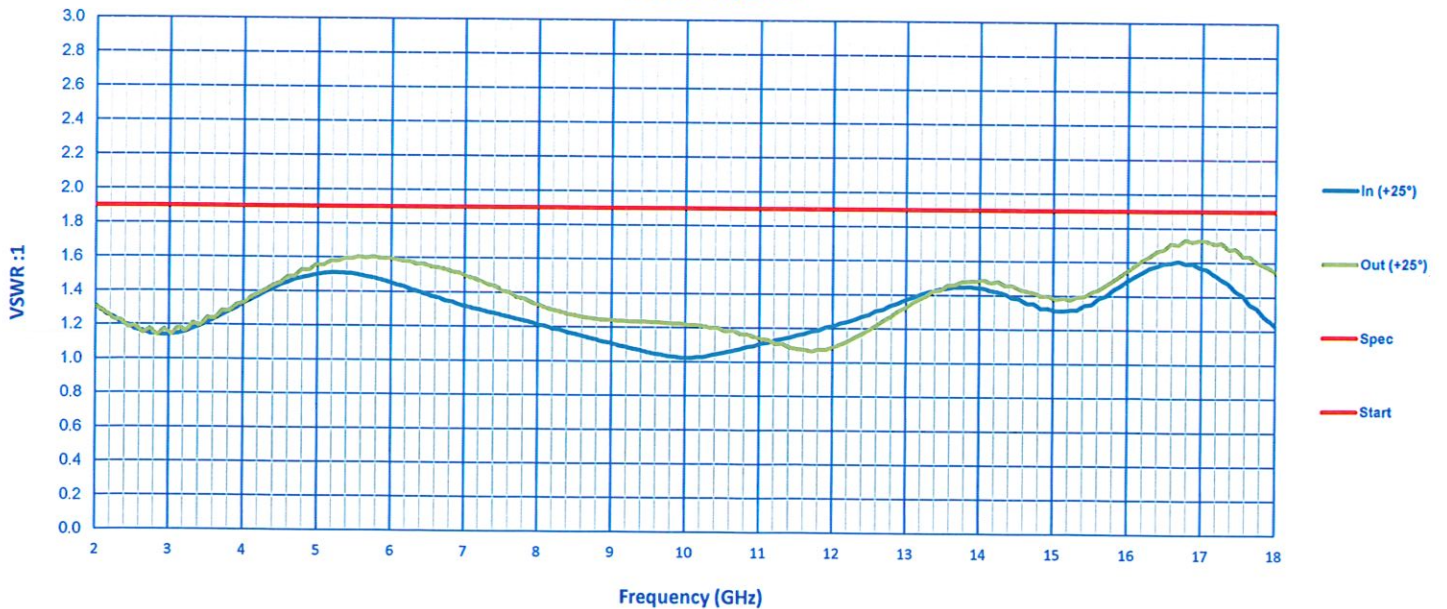


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Insertion Loss



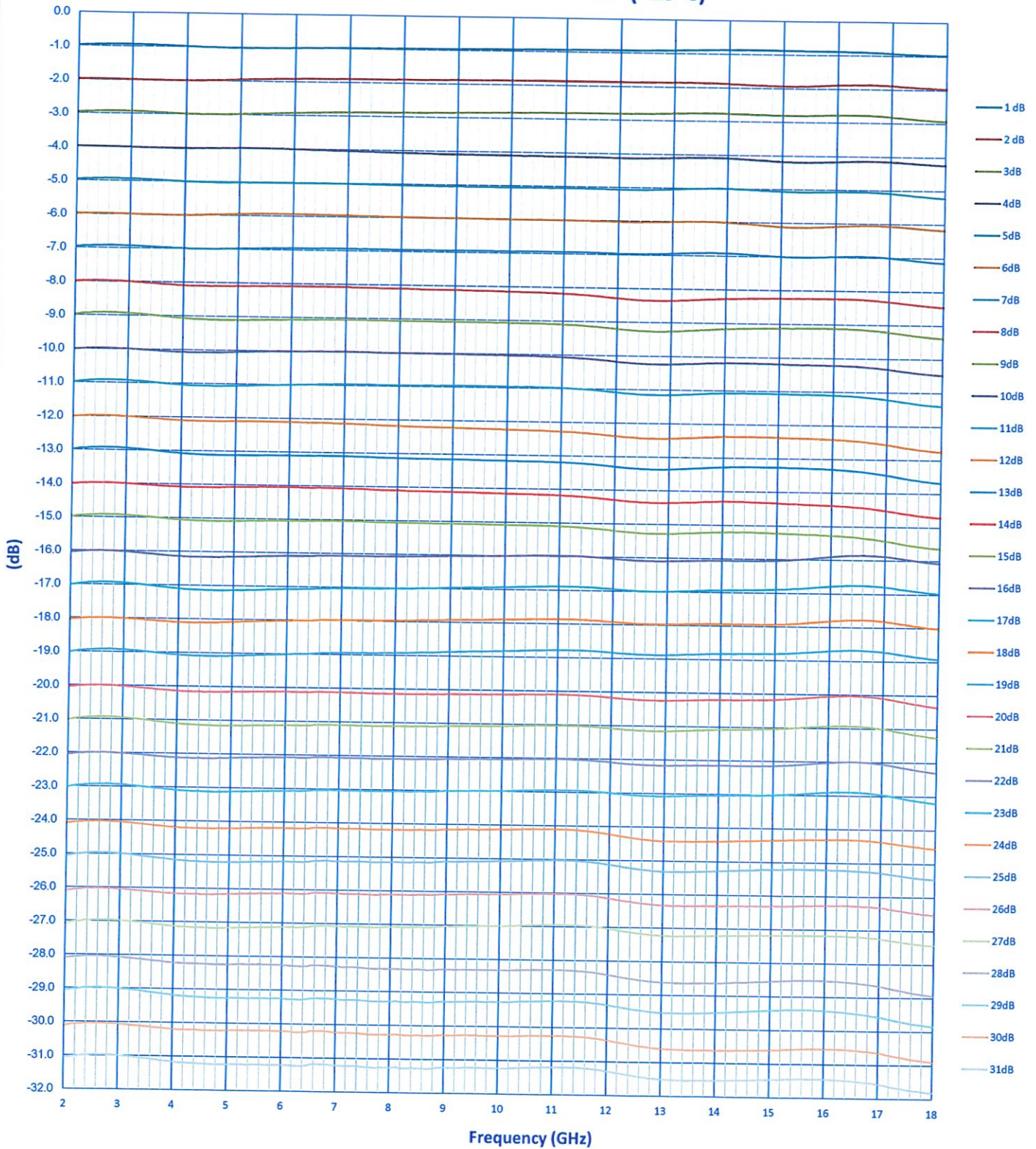
VSWR In/Out





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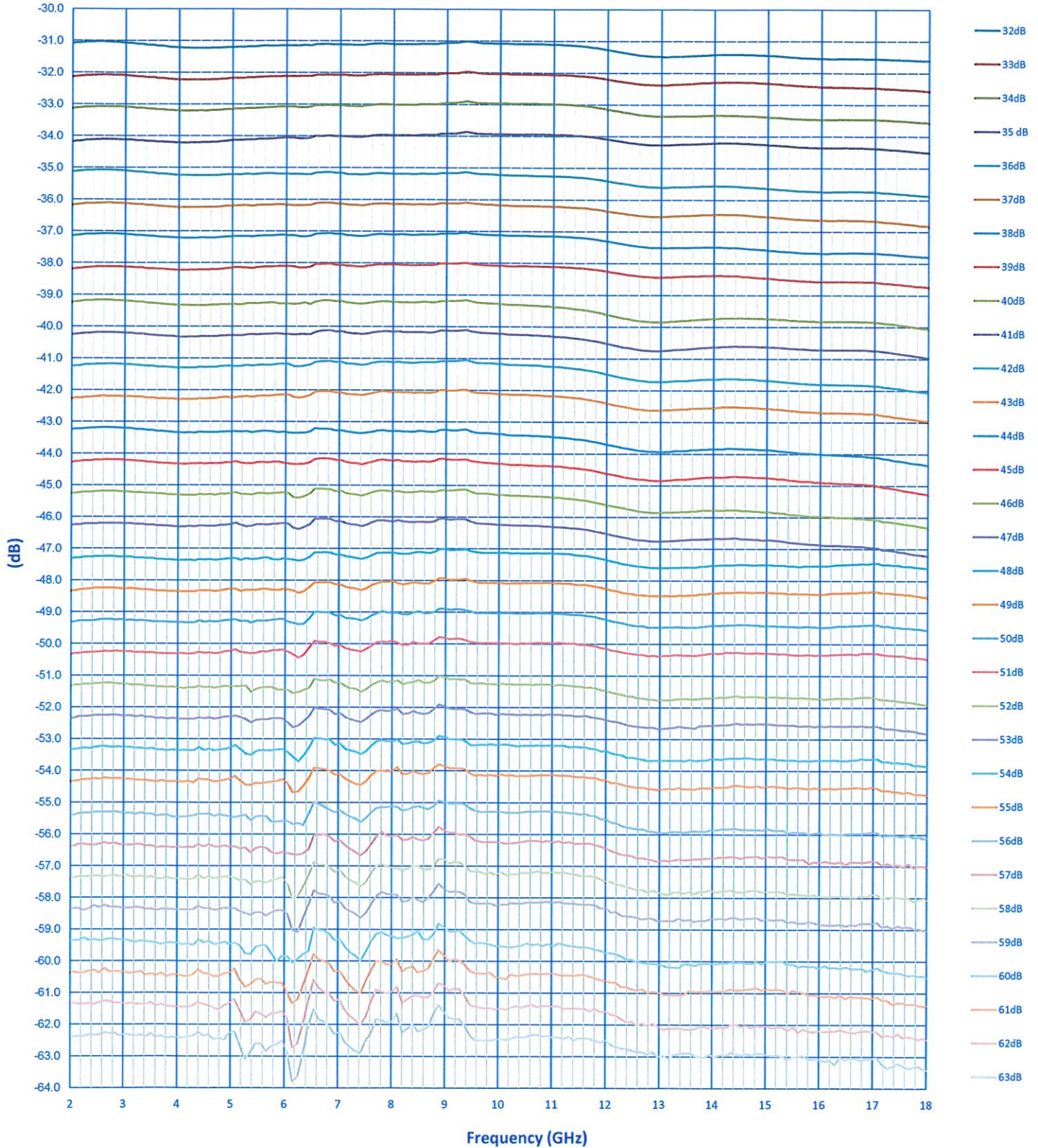
Attenuation 1 to 31dB (+25°C)





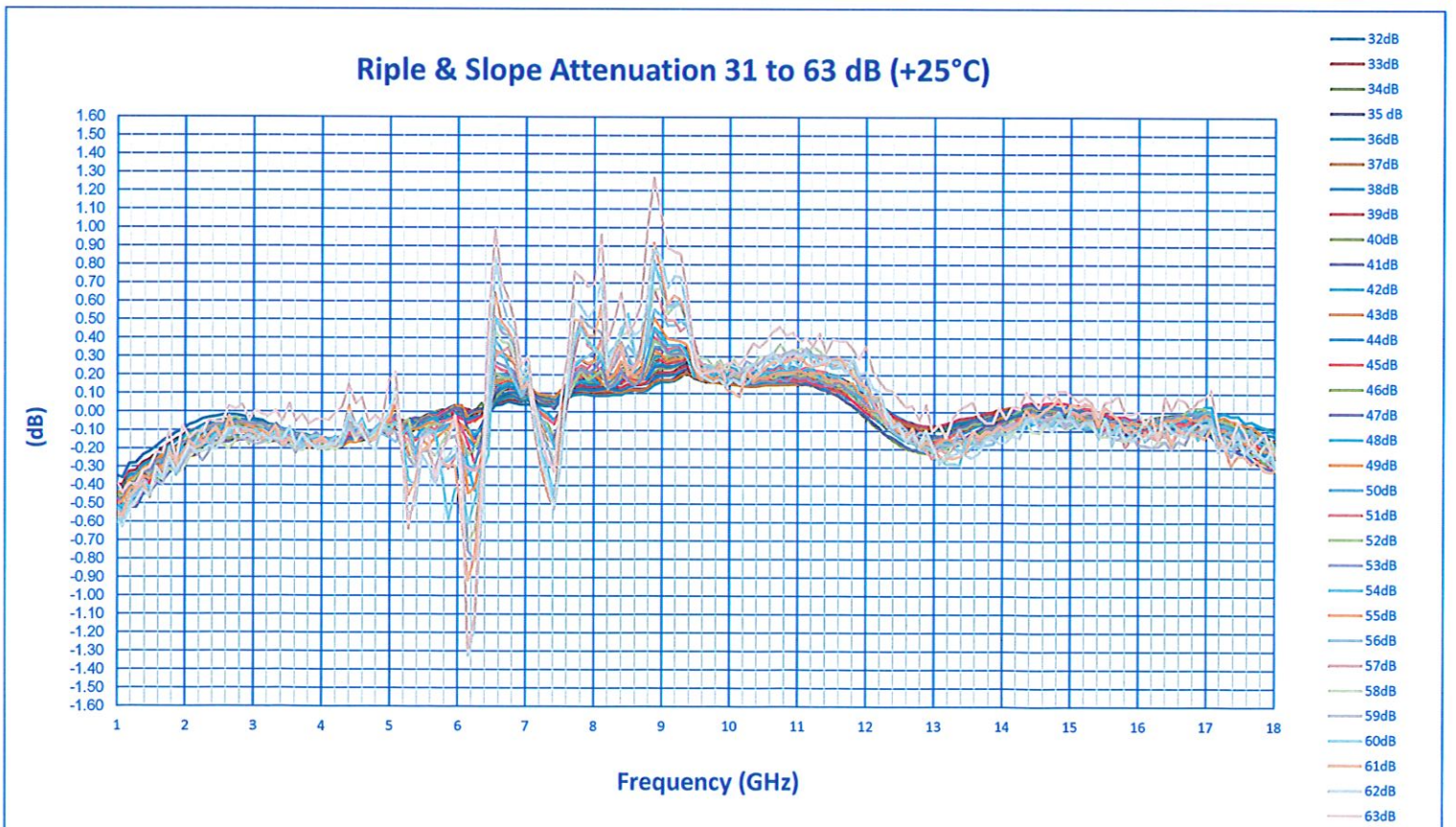
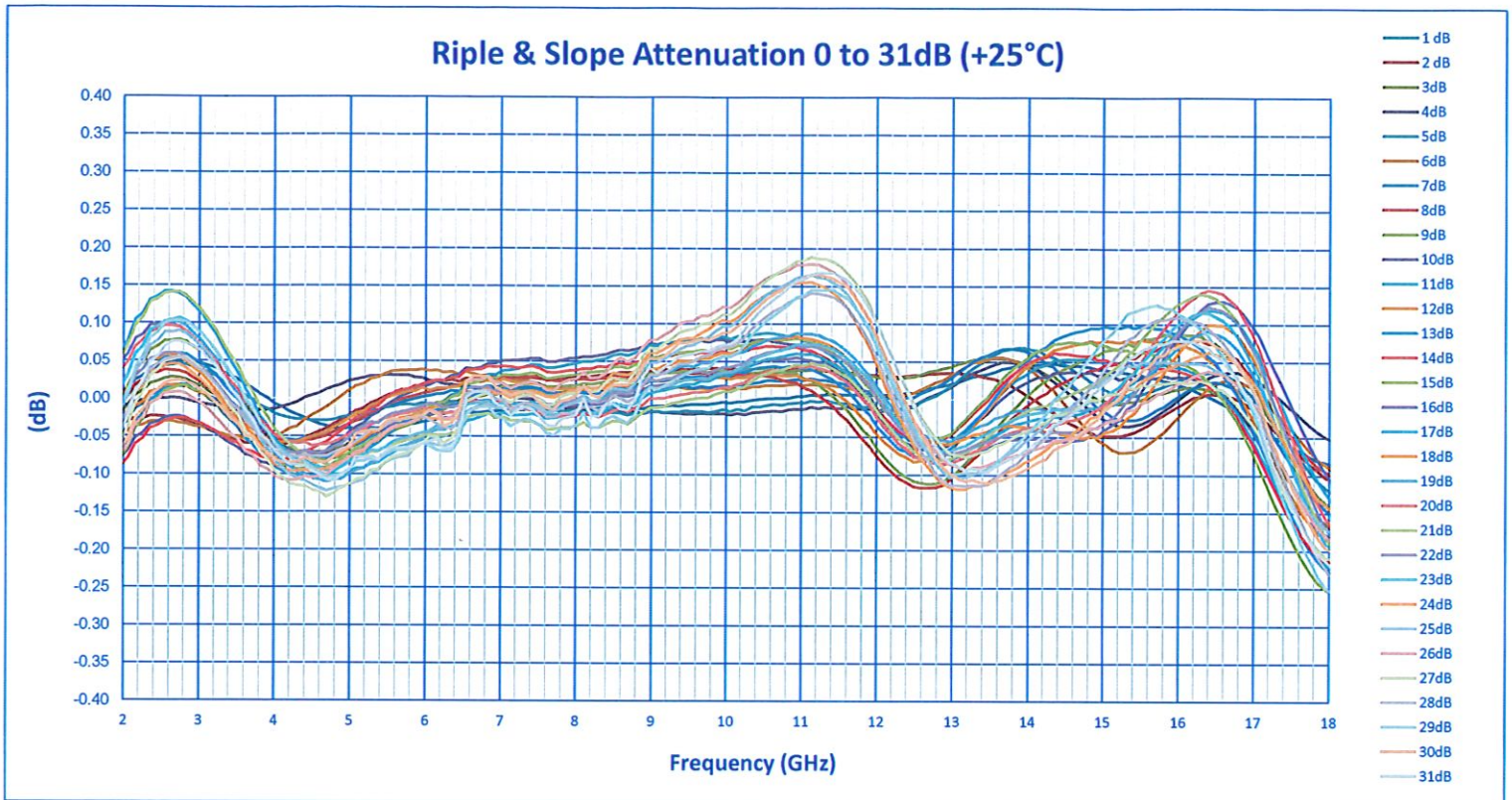
SUMMARY DATA On SBA-218-63DB-6B-SFF

Attenuation 32 to 63 dB (+25°C)





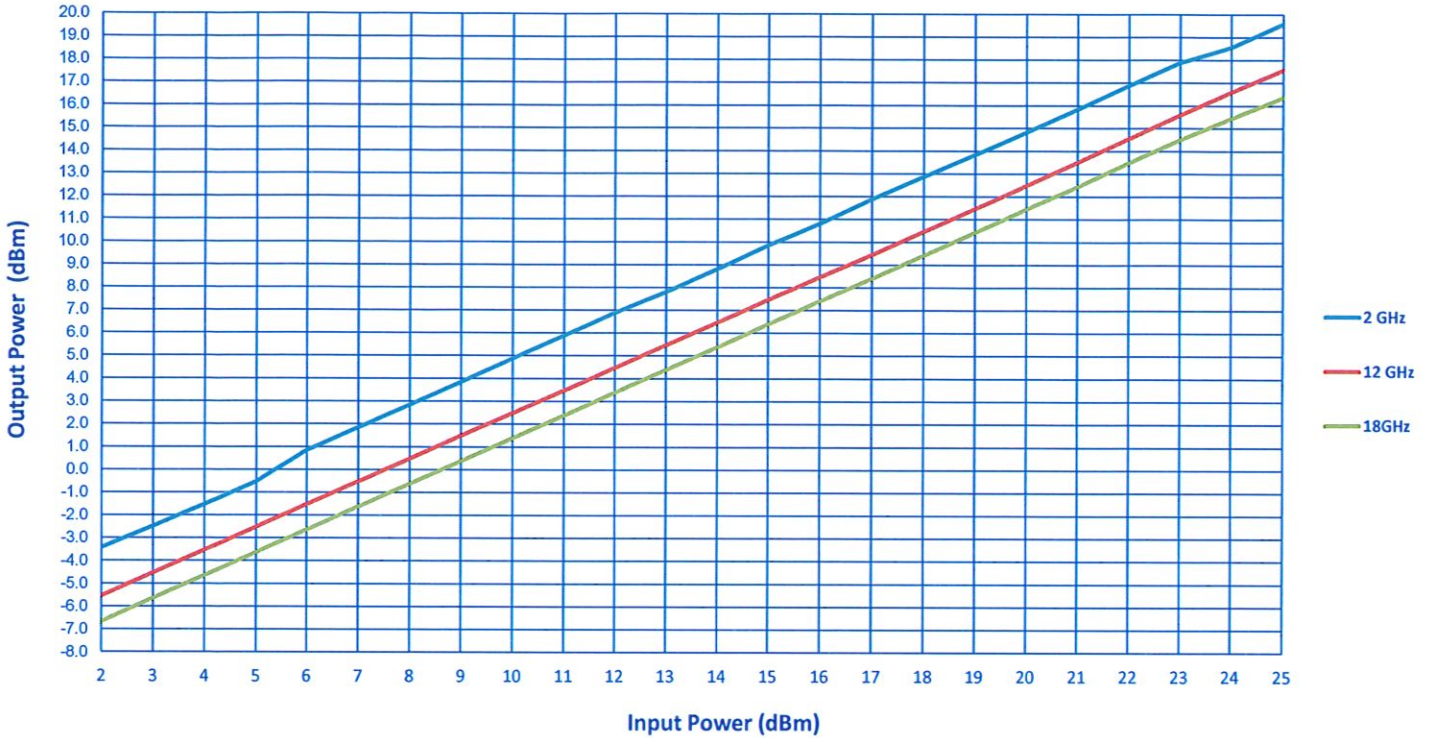
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SUMMARY DATA On SBA-218-63DB-6B-SFF

High Power Test Graph (2 to 18 GHz)

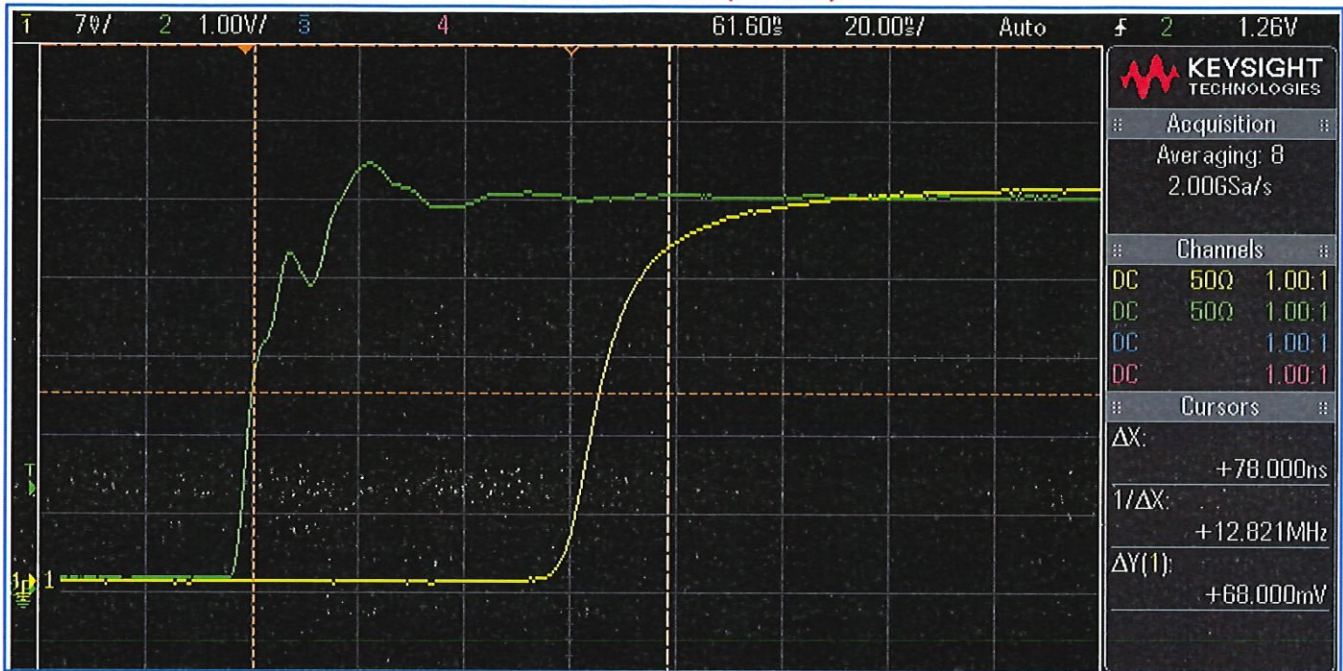


High Power Test Data 2 to 18 GHz (GW)											
2 GHz				12 GHz				18GHz			
Pin (dBm)	Pout (dBm)	Loss	Compression (dBm)	Pin (dBm)	Pout (dBm)	Loss	Compression (dBm)	Pin (dBm)	Pout (dBm)	Loss	Compression (dBm)
0	-5.431	5.431	0.000	0	-7.535	7.535	0.000	0	-8.661	8.661	0.000
1	-4.427	5.427	0.004	1	-6.535	7.535	0.000	1	-7.647	8.647	0.014
2	-3.419	5.419	0.012	2	-5.533	7.533	0.002	2	-6.653	8.653	0.008
3	-2.475	5.475	0.044	3	-4.523	7.523	0.012	3	-5.637	8.637	0.024
4	-1.525	5.525	0.094	4	-3.527	7.527	0.008	4	-4.632	8.632	0.029
5	-0.530	5.530	0.099	5	-2.527	7.527	0.008	5	-3.629	8.629	0.032
6	0.855	5.145	0.286	6	-1.527	7.527	0.008	6	-2.627	8.627	0.034
7	1.846	5.154	0.277	7	-0.528	7.528	0.007	7	-1.623	8.623	0.038
8	2.842	5.158	0.273	8	0.473	7.527	0.008	8	-0.621	8.621	0.040
9	3.846	5.154	0.277	9	1.476	7.524	0.011	9	0.382	8.618	0.043
10	4.880	5.120	0.311	10	2.478	7.522	0.013	10	1.389	8.611	0.050
11	5.891	5.109	0.322	11	3.477	7.523	0.012	11	2.393	8.607	0.054
12	6.895	5.105	0.326	12	4.474	7.526	0.009	12	3.397	8.603	0.058
13	7.806	5.194	0.237	13	5.471	7.530	0.006	13	4.395	8.605	0.056
14	8.815	5.185	0.246	14	6.465	7.535	0.000	14	5.396	8.604	0.057
15	9.861	5.140	0.292	15	7.467	7.534	0.002	15	6.395	8.605	0.056
16	10.802	5.198	0.233	16	8.457	7.543	0.008	16	7.401	8.599	0.062
17	11.892	5.108	0.323	17	9.451	7.549	0.014	17	8.401	8.599	0.062
18	12.875	5.125	0.306	18	10.457	7.543	0.008	18	9.411	8.589	0.072
19	13.849	5.151	0.280	19	11.469	7.531	0.004	19	10.423	8.577	0.084
20	14.821	5.179	0.252	20	12.485	7.515	0.020	20	11.450	8.550	0.111
21	15.840	5.160	0.271	21	13.500	7.500	0.035	21	12.440	8.560	0.101
22	16.880	5.120	0.311	22	14.550	7.450	0.085	22	13.480	8.520	0.141
23	17.890	5.110	0.321	23	15.580	7.420	0.115	23	14.500	8.500	0.161
24	18.560	5.440	0.009	24	16.600	7.400	0.135	24	15.450	8.550	0.111
25	19.580	5.420	0.011	25	17.570	7.430	0.105	25	16.350	8.650	0.011



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Switching Speed ON
20 ns Per Div.
Measured Value (78.0 ns)



Switching Speed OFF
5 ns Per Div.
Measured Value (12.40 ns)

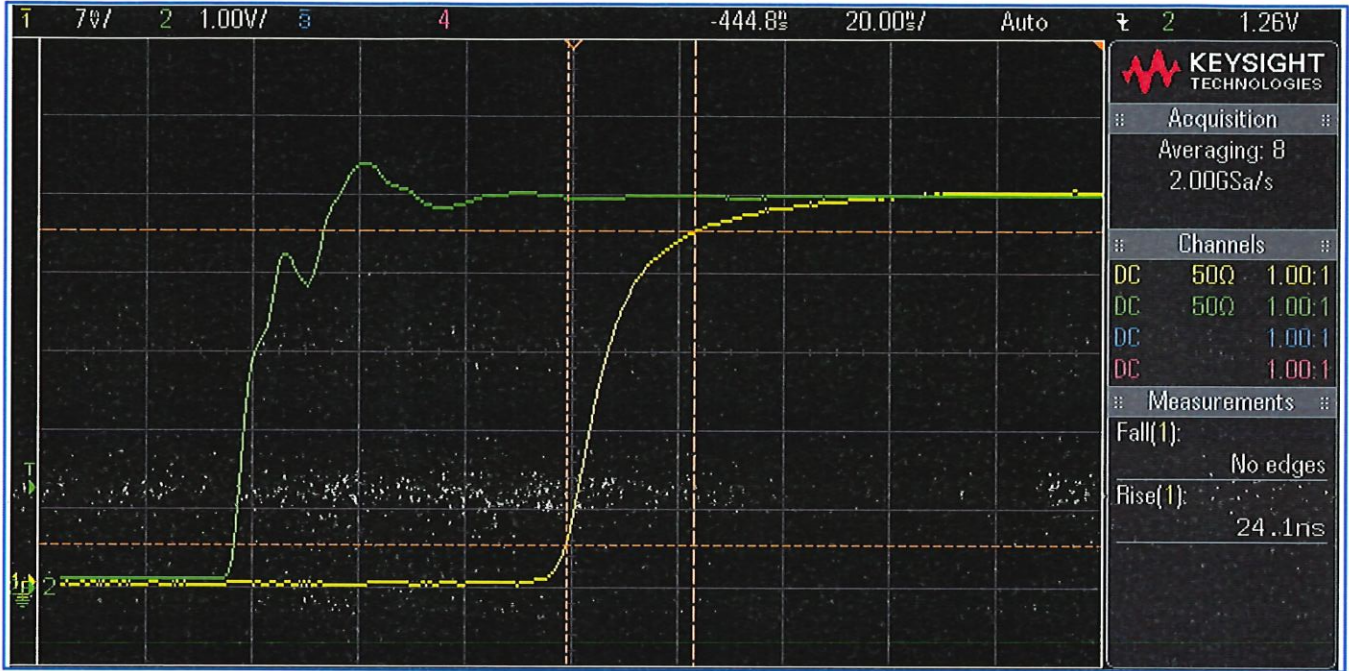


Green Trace = TTL Signal
Yellow Trace = RF Signal



SUMMARY DATA On SBA-218-63DB-6B-SFF

Rise Time
20 ns Per Div.
Measured Value (24.0 ns)



Fall Time
5 ns Per Div.
Measured Value (3.90 ns)

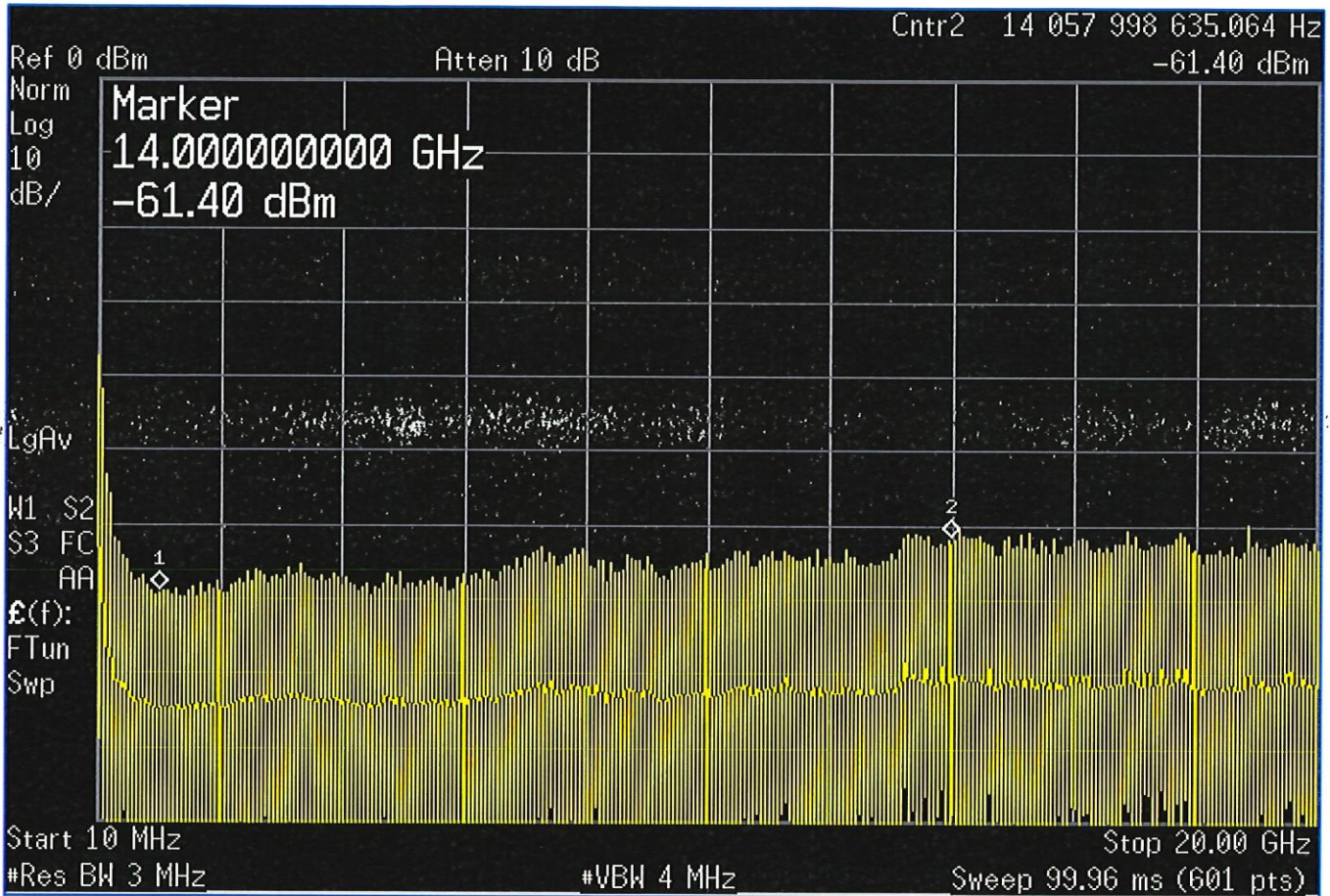


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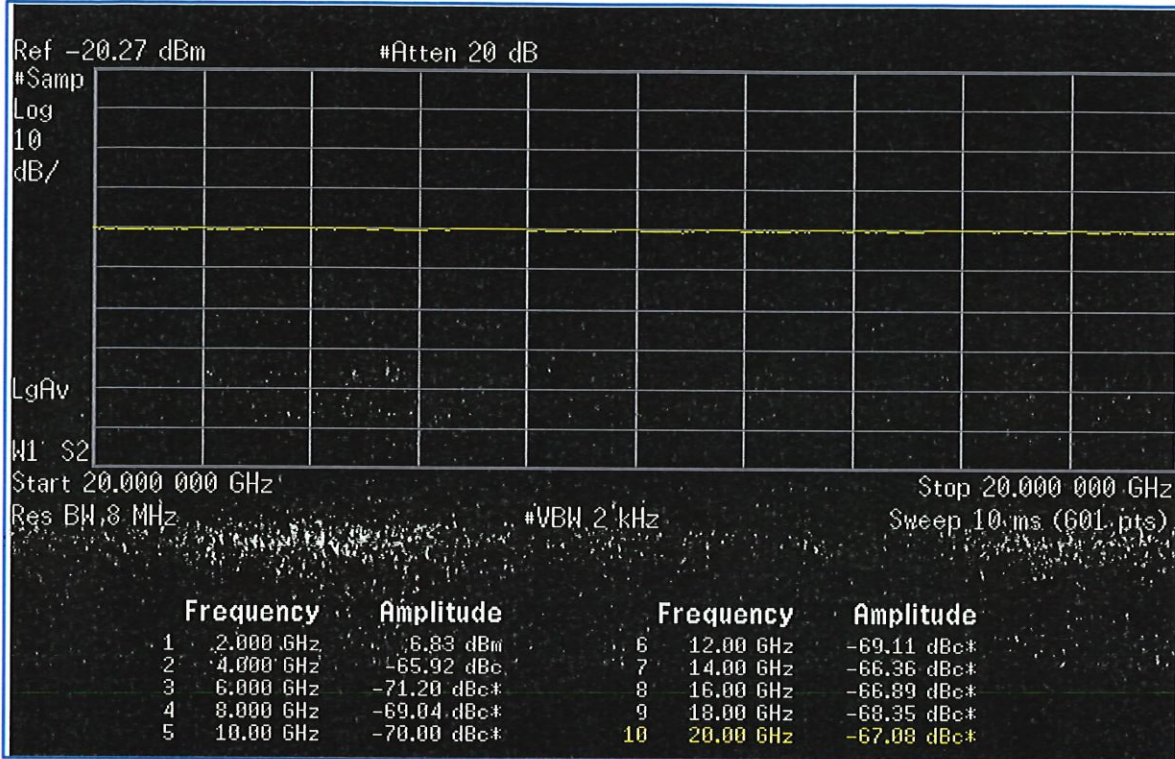
Video Leakage
(Set to RF Video BW Resolution 3MHz)



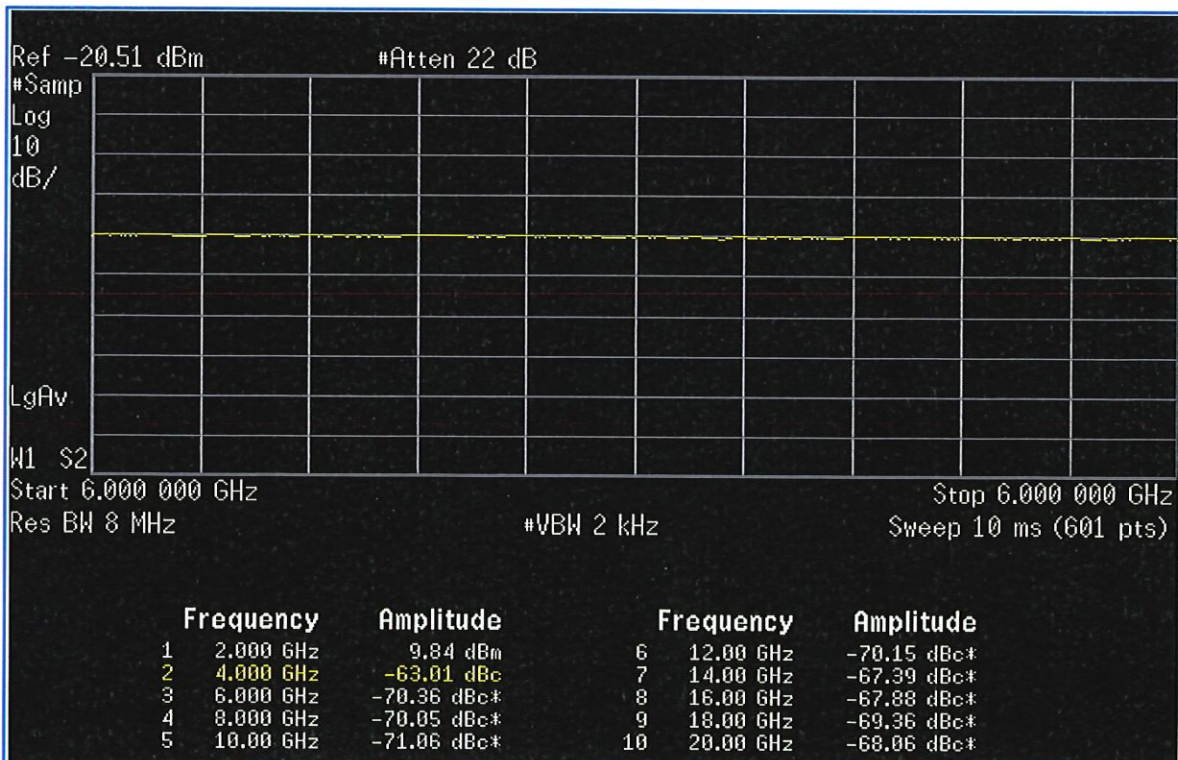


SUMMARY DATA On SBA-218-63DB-6B-SFF

Harmonics 2 to 20 GHz (Fundamental 2GHz)
Input Power +12 dBm



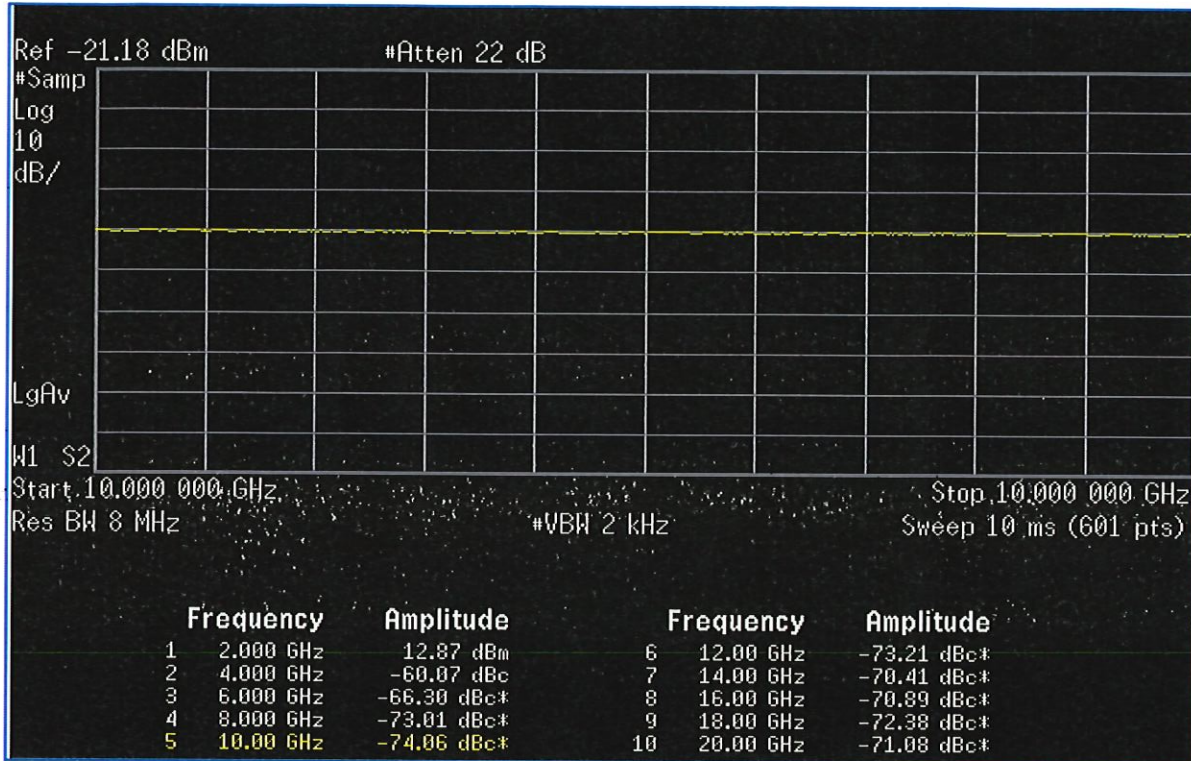
Harmonics 2 to 20 GHz (Fundamental 2GHz)
Input Power +15 dBm





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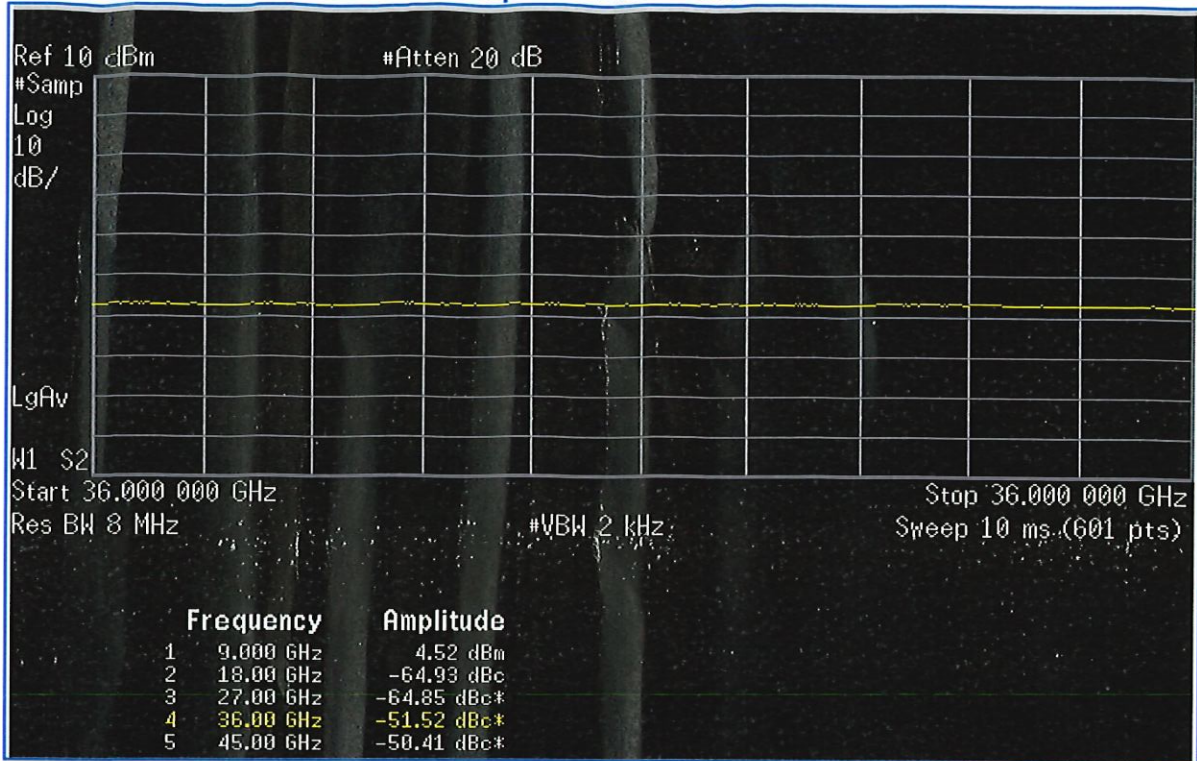
Harmonics 2 to 20 GHz (Fundamental 2GHz)
Input Power +18 dBm



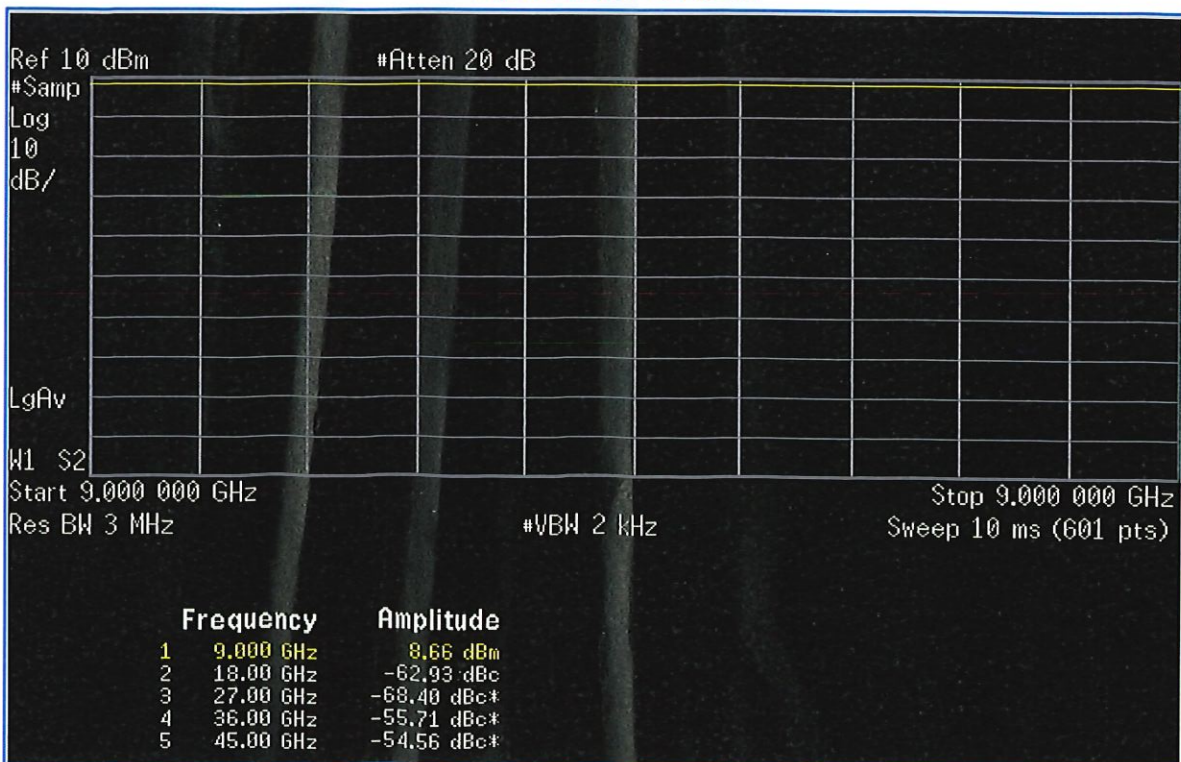


SUMMARY DATA On SBA-218-63DB-6B-SFF

Harmonics 8 to 40 GHz (Fundamental 9GHz)
Input Power +12 dBm



Harmonics 8 to 40 GHz (Fundamental 9GHz)
Input Power +15 dBm





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