



**Typical Characteristics
ON
P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)**

PMI MODEL P8T-200M18-60-T-SFF-NSI IS A 200MHZ TO 18GHZ (USABLE OVER 200MHZ-19GHZ) SINGLE POLE EIGHT THROW, ABSORPTIVE SWITCH MODULE WITH LOW LOSS, HIGH SPEED AND WITH INTEGRAL TTL DRIVER AND 3 BIT DECODER , DESIGNED FOR BROADBAND OPERATIONS.



October 27, 2020

Designed By:

Dr. Ashok Gorwara

Drawn, Tested, and Reported By:

Garrett Radtke



Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Outline Drawing

DESCRIPTION

PMI MODEL P8T-200M18-60-T-SFF-NSI IS A 200MHZ TO 18GHZ (USABLE OVER 200MHZ-19GHZ) SINGLE POLE EIGHT THROW, ABSORPTIVE SWITCH MODULE WITH LOW LOSS, HIGH SPEED AND WITH INTEGRAL TTL DRIVER AND 3 BIT DECODER , DESIGNED FOR BROADBAND OPERATIONS.

SPECIFICATIONS:

- FREQUENCY: 200 MHz TO 18 GHz
- INSERTION LOSS: 0.2-6 GHz - 2.5dB MAX
6-12 GHz - 3.5dB MAX
12-18 GHz - 4.5dB MAX
- ISOLATION: 60dB MIN
- VSWR: ON IN/OUT: 2.0:1 MAX
ABSORPTIVE OUT/OFF: 2.0:1 MAX
- INSERTION LOSS FLATNESS / 1GHz: +/-0.5 dB MAX
- RF INPUT POWER: +20 dBm MAX
- SWITCHING SPEED: 100 ns MAX
- IIP3: 40 dBm TYP.
- IMPEDANCE: 50 OHMS
- CONTROL: 3 BIT TTL LOGIC (SEE TABLE)
- POWER SUPPLY: +5V @ 300 mA MAX.
-5V @ 100mA MAX.
- SIZE: ϕ 1.500 CIRCLE POINT TO POINT X 0.400 (H)
- WEIGHT: 2.5 OUNCES TYPICAL
- FINISH: BLUE PAINT

TRUTH TABLE

E1	E2	E3	PATH ON
0	0	0	J1
1	0	0	J2
0	1	0	J3
1	1	0	J4
0	0	1	J5
1	0	1	J6
0	1	1	J7
1	1	1	J8

ENVIRONMENTAL RATINGS

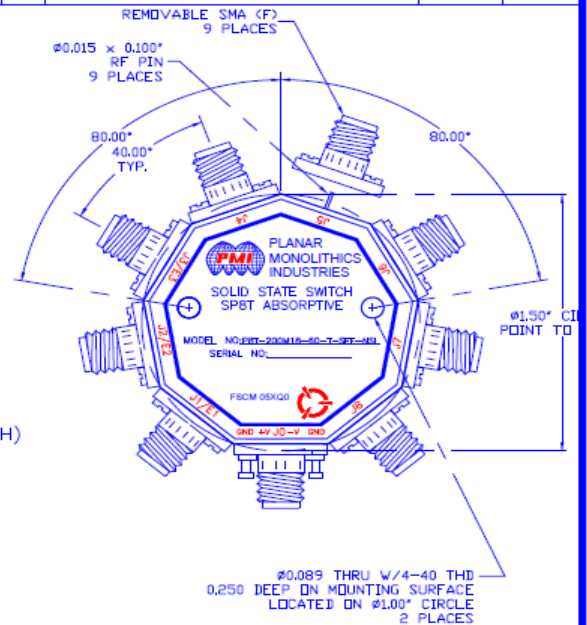
- TEMPERATURE: 0 °C TO +60 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103B COND. B
- SHOCK: MIL-STD-202, METHOD 213B COND. B
- VIBRATION: MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS
ARE IN INCHES (mm)
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A1	INITIAL RELEASE	7/10/2020	



PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN: <i>JPH</i>		1/22/20	PRODUCT FEATURE P8T-200M18-60-T-SFF-NSI		
REDRAWN:			SIZE: A	FSM NO: 05XQ0	DWG NO: 27040300
ISSUED:			SCALE: N:S		SHEET 1 OF 2



Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Outline Drawing

MECHANICAL OUTLINE

MOUNTING SURFACE

MOUNTING SURFACE

0.40

0.127 (P)

0.100

0.020 SOLDIER PIN 5 PLACES

0.55

0.66

GND

+V

-V

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	INITIAL RELEASE	7/10/2020	

REMOVABLE SMA (F) 9 PLACES

0.015 x 0.100" RF PIN 9 PLACES

80.00°

40.00° TYP.

80.00°

PLANAR MONOLITHICS INDUSTRIES

SOLID STATE SWITCH

SP8T ABSORPTIVE

MODEL NO. P8T-200M18-60-T-SFF-NSI

SERIAL NO.:

FSCM 05XQ00

0.089 THRU W/4-40 THD 0.250 DEEP IN MOUNTING SURFACE LOCATED ON 0.100" CIRCLE 2 PLACES

0.150" CIRC POINT TO

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ALL DIMENSIONS ARE IN INCHES (mm)

TOLERANCES:

XXX ±0.020

XXXX ±0.010

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APPROVALS	DATE	TITLE		
SJK	1/22/20	PRODUCT FEATURE P8T-200M18-60-T-SFF-NSI		
REDRAWN		SIZE	FSCM NO.	DWG NO.
		A	05XQ0	27040300
ISSUED		SCALE	N:S	SHEET 2 OF 2



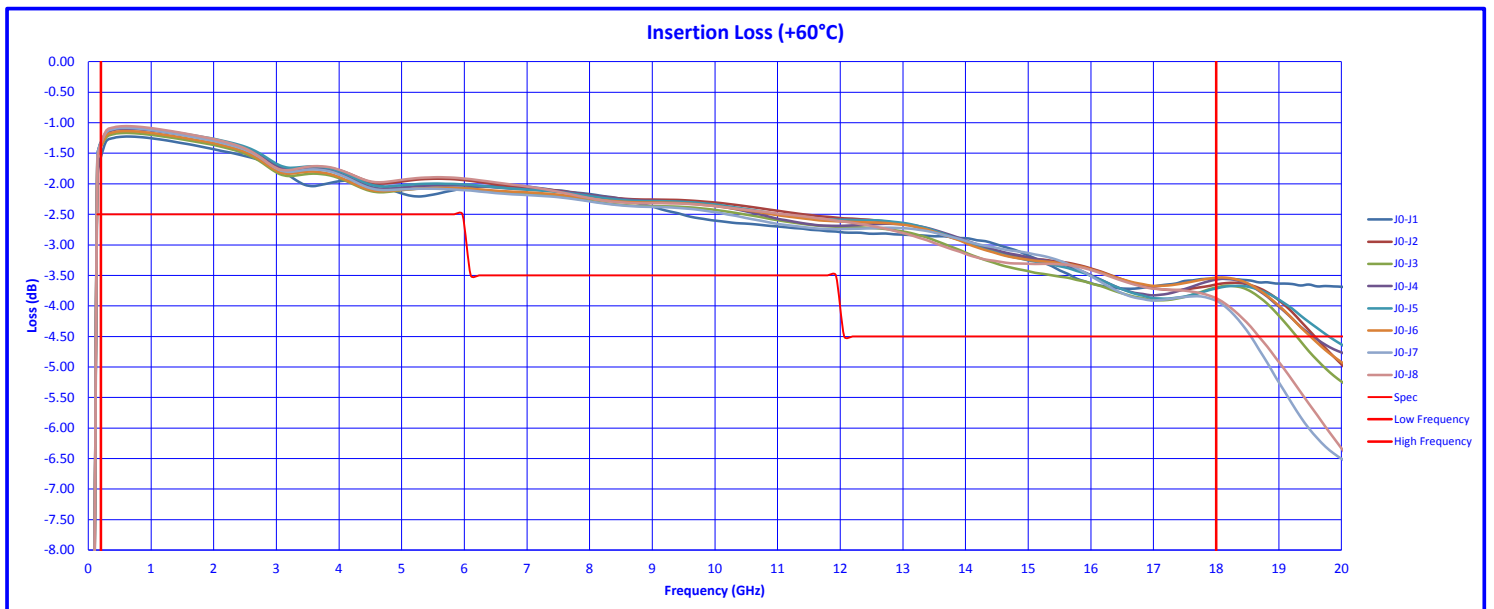
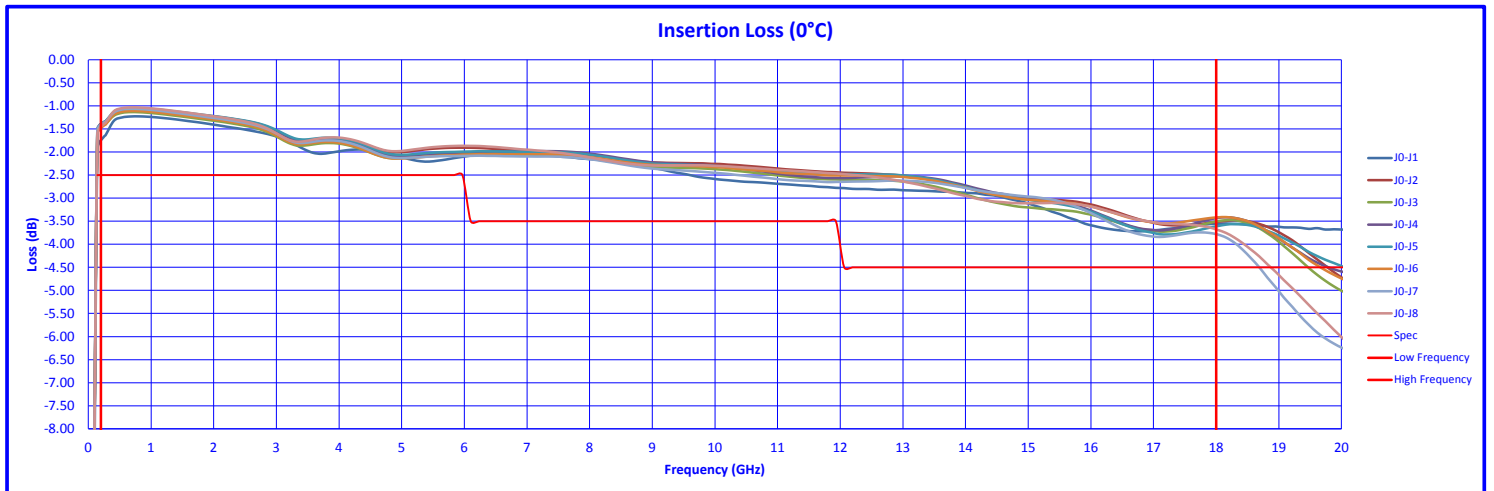
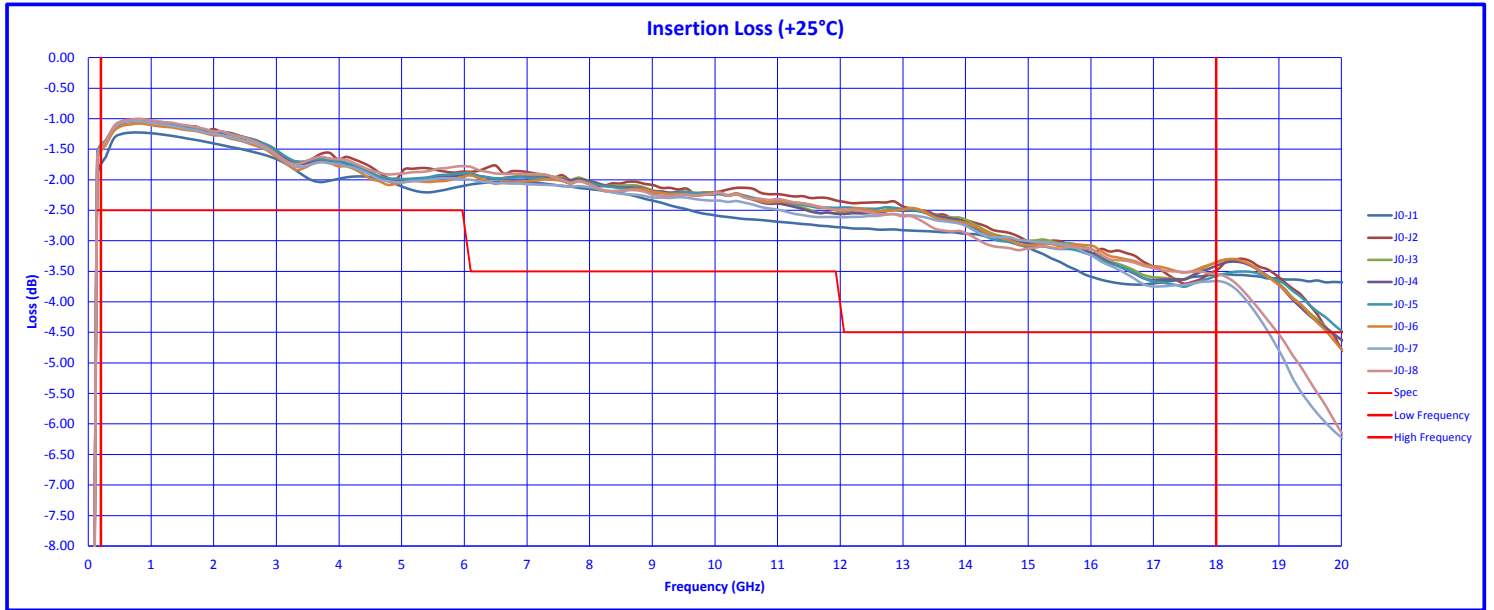
Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Technical Specifications

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS			QA QC	
			+25°C	0°C	+60°C		
1	Frequency Range:	200MHz to 18 GHz	200MHz to 18 GHz	200MHz to 18 GHz	200MHz to 18 GHz		
		Usable 200MHz to 19GHz	Tested 200MHz to 19GHz	Tested 200MHz to 19GHz	Tested 200MHz to 19GHz		
2	Insertion Loss:	200MHz - 300MHz - 2.5 dB Max.	1.63 dB	1.32 dB	1.25 dB		
		300MHz - 400MHz - 2.5 dB Max.	1.32 dB	1.25 dB	1.23 dB		
		400MHz - 500MHz - 2.5 dB Max.	1.25 dB	1.23 dB	1.23 dB		
		1GHz - 2GHz - 2.5 dB Max.	1.46 dB	1.49 dB	1.52 dB		
		2 - 6 GHz - 2.5 dB Max.	2.21 dB	2.21 dB	2.21 dB		
		6 -12 GHz - 3.5 dB Max.	2.8 dB	2.8 dB	2.8 dB		
		12 -18 GHz - 4.5 dB Max.	3.75 dB	3.84 dB	3.91 dB		
		18GHz - 19GHz - 6.0 dB Max.	5.24 dB	5.36 dB	5.39 dB		
		200MHz to 19GHz - 6.0 dB Max.	5.24 dB	5.36 dB	5.39 dB		
3	Isolation:		See Graphs	See Graphs	See Graphs		
		200MHz - 300MHz - 60 dB Min.	85.96 dB	80.05 dB	81.18 dB		
		300MHz - 400MHz - 60 dB Min.	84.78 dB	78.73 dB	80.94 dB		
		400MHz - 500MHz - 60 dB Min.	84.7 dB	78.11 dB	80.86 dB		
		1GHz - 2GHz - 60 dB Min.	85.28 dB	78.08 dB	81.42 dB		
		2GHz- 18GHz - 60 dB Min.	78.18 dB	77.18 dB	74.68 dB		
		18GHz - 19GHz - 60 dB Min.	76.34 dB	75.34 dB	74.68 dB		
		200MHz to 19GHz - 60 dB Min.	76.34 dB	75.34 dB	74.68 dB		
			See Graphs	See Graphs	See Graphs		
4	VSWR: In/Out:	200MHz - 300MHz - 1.3:1 Max.	1.29:1	1.29:1	1.25:1		
		300MHz - 400MHz - 1.3:1 Max.	1.25:1	1.25:1	1.24:1		
		400MHz - 500MHz - 1.4:1 Max.	1.24:1	1.24:1	1.24:1		
		1GHz - 2GHz - 1.5:1 Max.	1.24:1	1.24:1	1.24:1		
		2GHz- 18GHz - 2.0:1 Max.	1.96:1	1.93:1	2.87:1		
		18GHz - 19GHz - 3.0:1 Max.	2.75:1	2.81:1	2.87:1		
		200MHz - 19GHz 3.0:1 Max.	2.75:1	2.81:1	2.87:1		
			See Graphs	See Graphs	See Graphs		
			See Graphs	See Graphs	See Graphs		
5	Insertion Loss: Flatness / 1GHz	± 0.5 dB Max.	-0.49 dB/+0.29 dB	-0.44 dB/+0.29 dB	-0.38 dB/+0.29 dB		
		200MHz to 19GHz	-1.6 dB/+0.29 dB	-1.66 dB/+0.29 dB	-1.56 dB/+0.29 dB		
6	Amplitude Balance:	± 1.0 dB Typ.	-0.15 dB/+0.53 dB	-0.3 dB/+0.45 dB	-0.38 dB/+0.33 dB		
		200MHz to 19GHz	-1.6 dB/+0.53 dB	-1.72 dB/+0.45 dB	-1.75 dB/+0.33 dB		
7	Phase Balance:	± 25 Degree Typ.	-16.09°/+17.87°	-14.87°/+18.56°	-15.39°/+18.85°		
		200MHz to 19GHz	-19.08°/+17.87°	-17.34°/+18.56°	-18.52°/+18.85°		
7	RF Input Power (CW):	+20 dBm Max.	2.5 Watts (+34dBm) & 18GHz Pass See Graph	2.5 Watts (+34dBm) & 18GHz Pass See Graph	2.5 Watts (+34dBm) & 18GHz Pass See Graph		
8	Switching Speed:	100 ns Max.	ON : 76.2 ns OFF : 33.2 ns Rise Time : 55.6 ns Fall Time : 13.4 ns See Plots	ON : 76.2 ns OFF : 33.2 ns Rise Time : 55.6 ns Fall Time : 13.4 ns See Plots	ON : 76.2 ns OFF : 33.2 ns Rise Time : 55.6 ns Fall Time : 13.4 ns See Plots		
9	IIP3/OIP3:	+40 dBm Typ.	+38.73 dBm/+42.23 dBm See Plots	+38.73 dBm/+42.23 dBm See Plots	+38.73 dBm/+42.23 dBm See Plots		
10	P1dB:	+30 dBm Typ.	+33 dBm See Graphs	+33 dBm See Graphs	+33 dBm See Graphs		
11	Video Transients:	1 V P-P Typ.	820 mV P-P	820 mV P-P	820 mV P-P		
12	Hot Switching:	+23 dBm Max.	Pass - Tested 1kHz TTL PRF & 50% DC	Pass - Tested 1kHz TTL PRF & 50% DC	Pass - Tested 1kHz TTL PRF & 50% DC		
13	Impedance:	50 Ω	Pass	Pass	Pass		
14	Power Supply:	+5 VDC @ 300 mA Typ. -5 VDC @ 100 mA Typ.	+5 VDC @ 119 mA -5 VDC @ 51 mA	+5 VDC @ 121 mA -5 VDC @ 52 mA	+5 VDC @ 124 mA -5 VDC @ 55 mA		
15	Control Signal:	3 Bit TTL Logic (See Table)				Pass	Pass
		E1	E2	E3	PATH ON		
		0	0	0	J1		
		1	0	0	J2		
		0	1	0	J3		
		1	1	0	J4		
		0	0	1	J5		
		1	0	1	J6		
		0	1	1	J7		
1	1	1	J8				

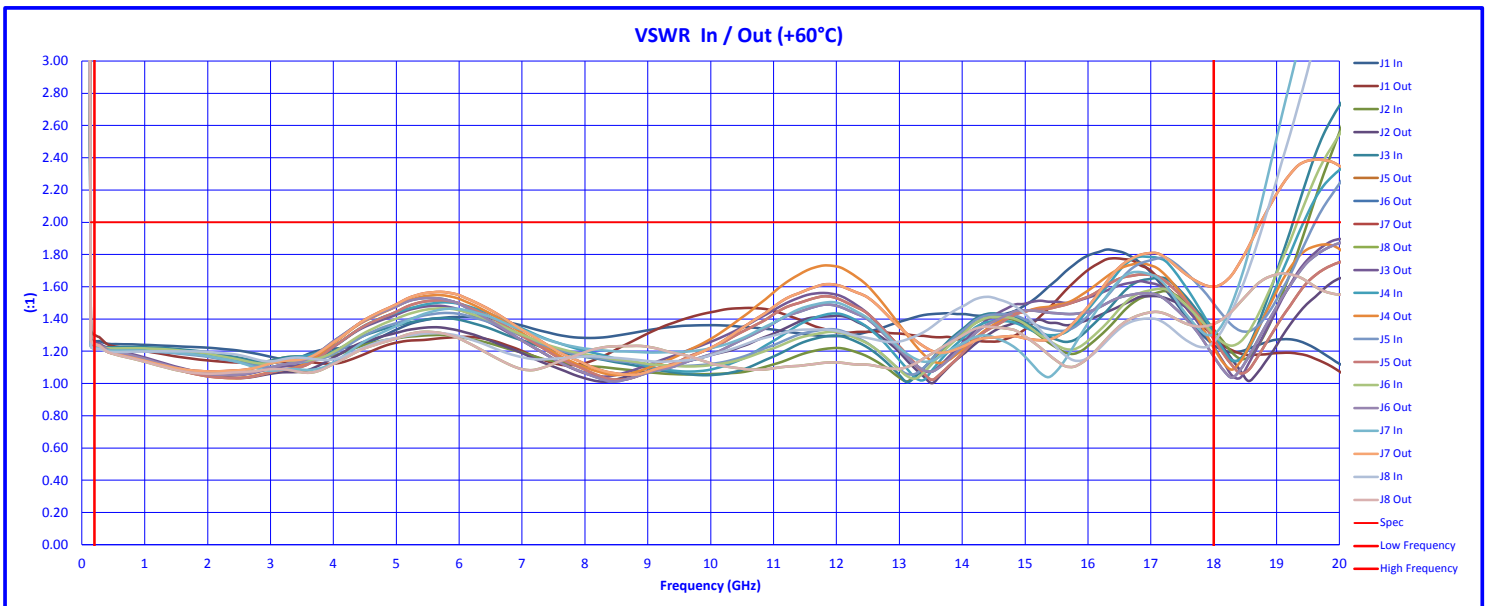
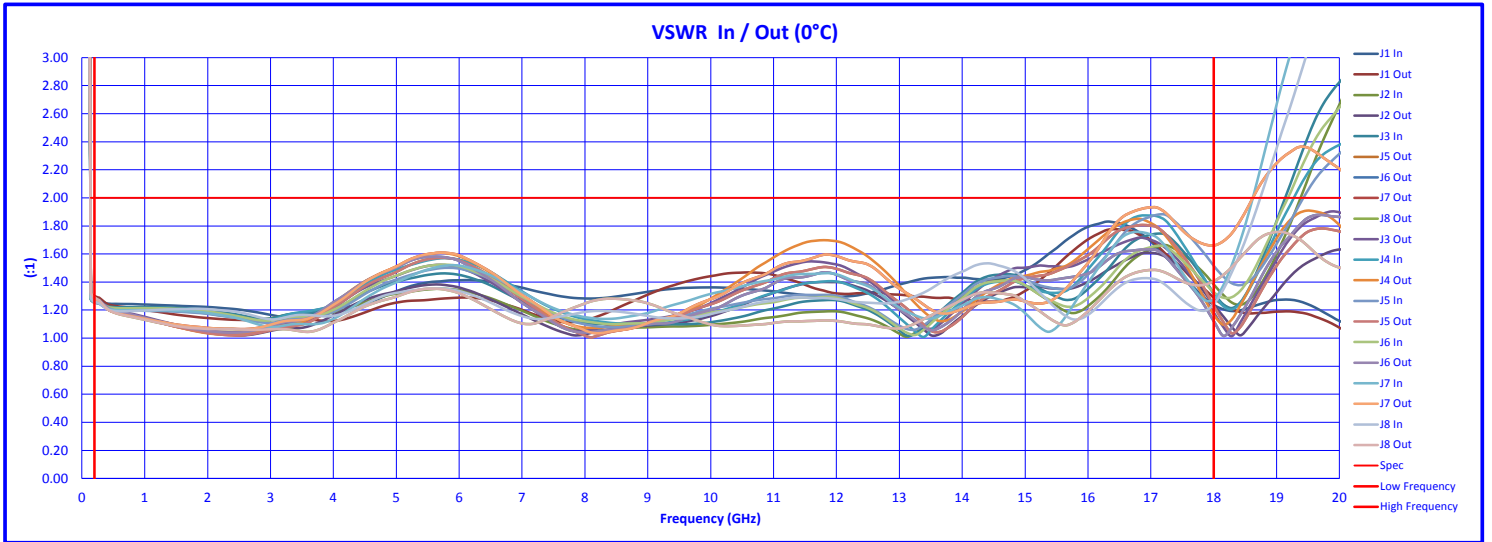
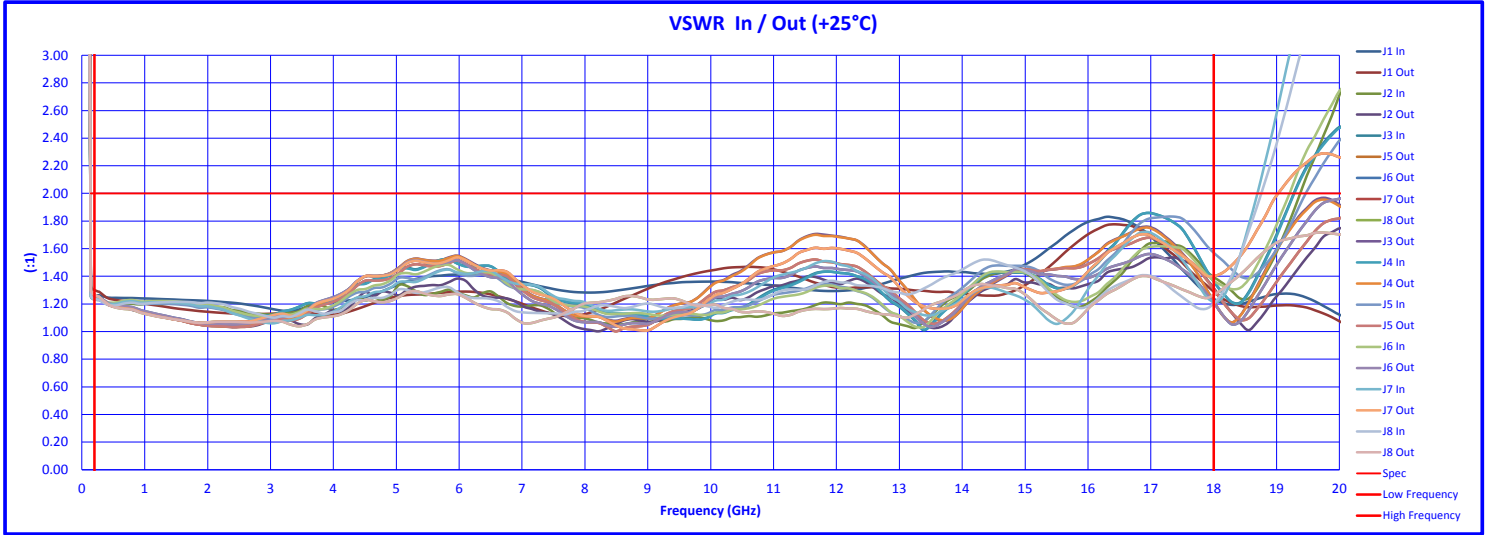


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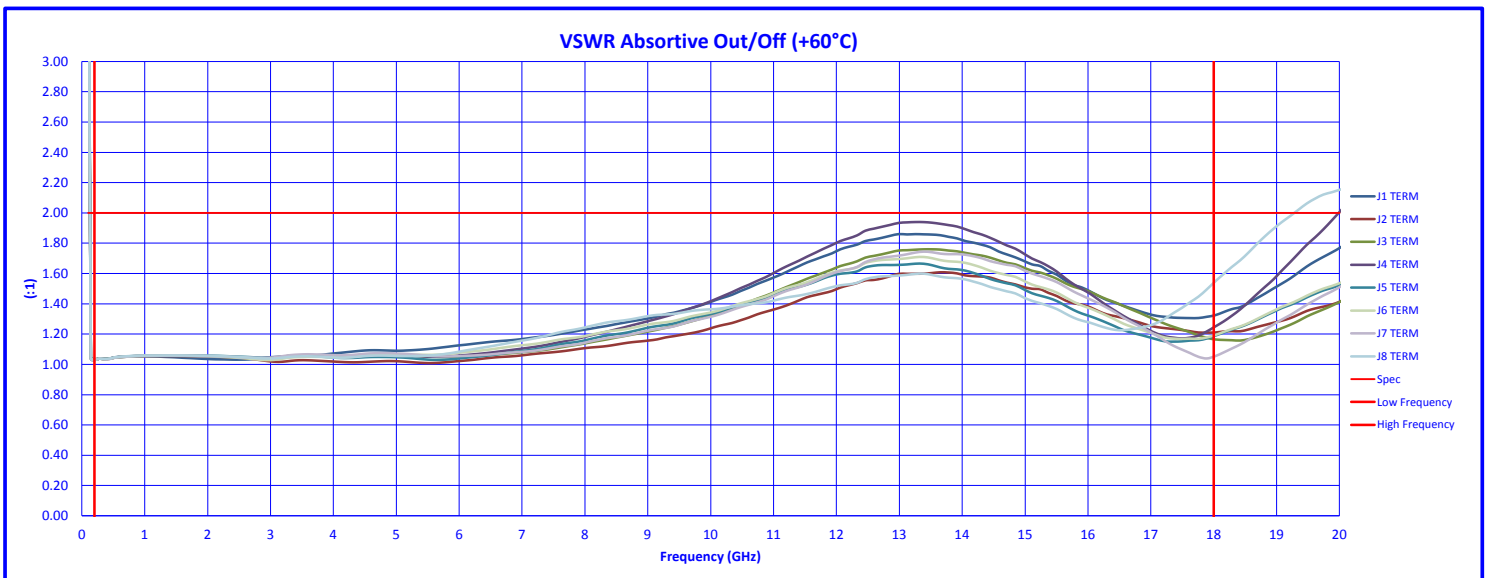
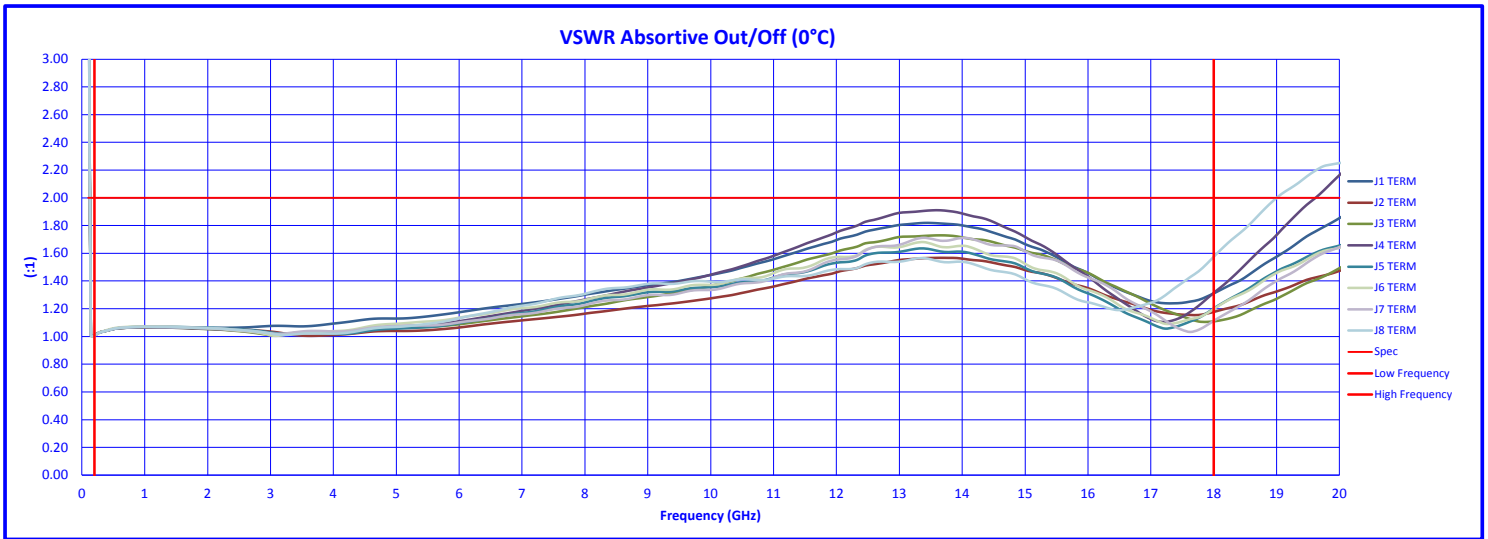
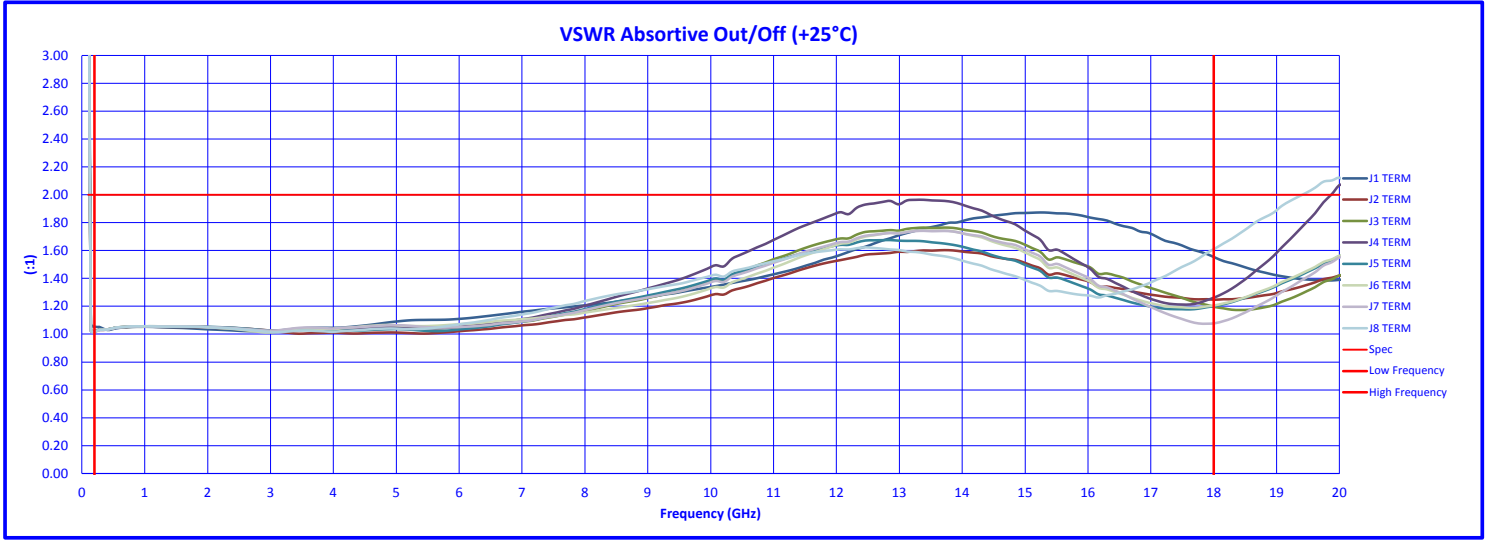


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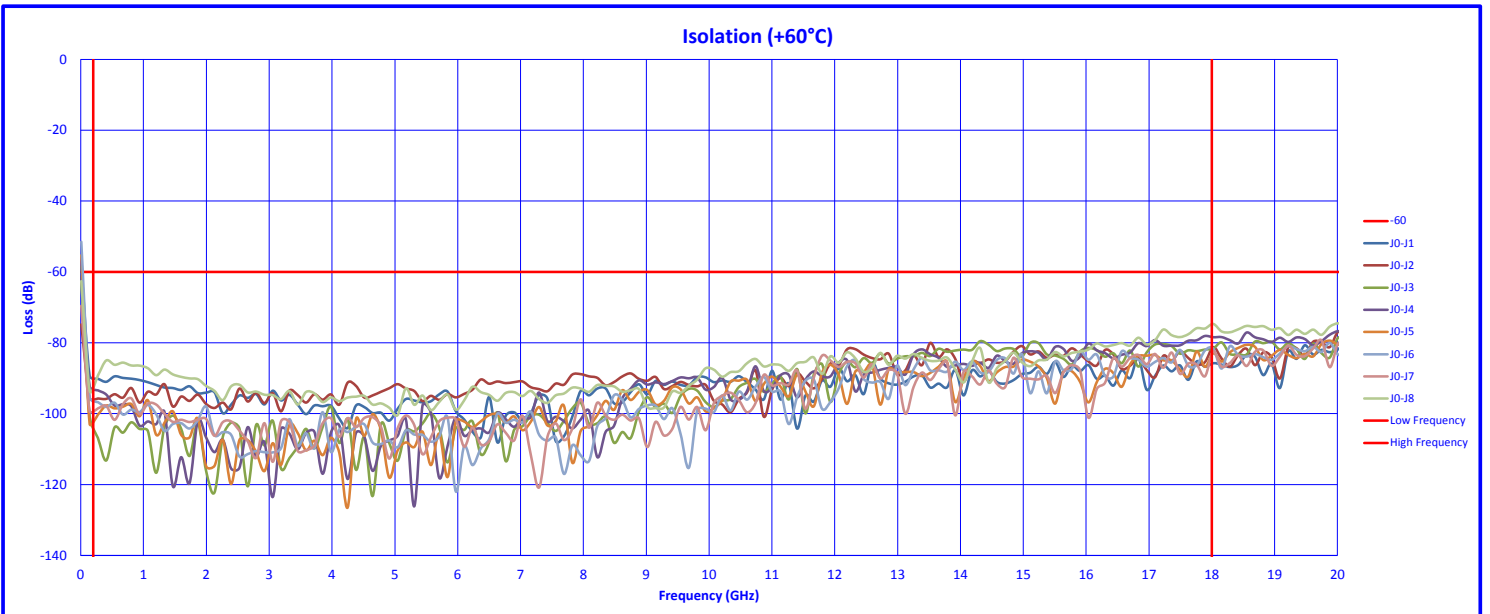
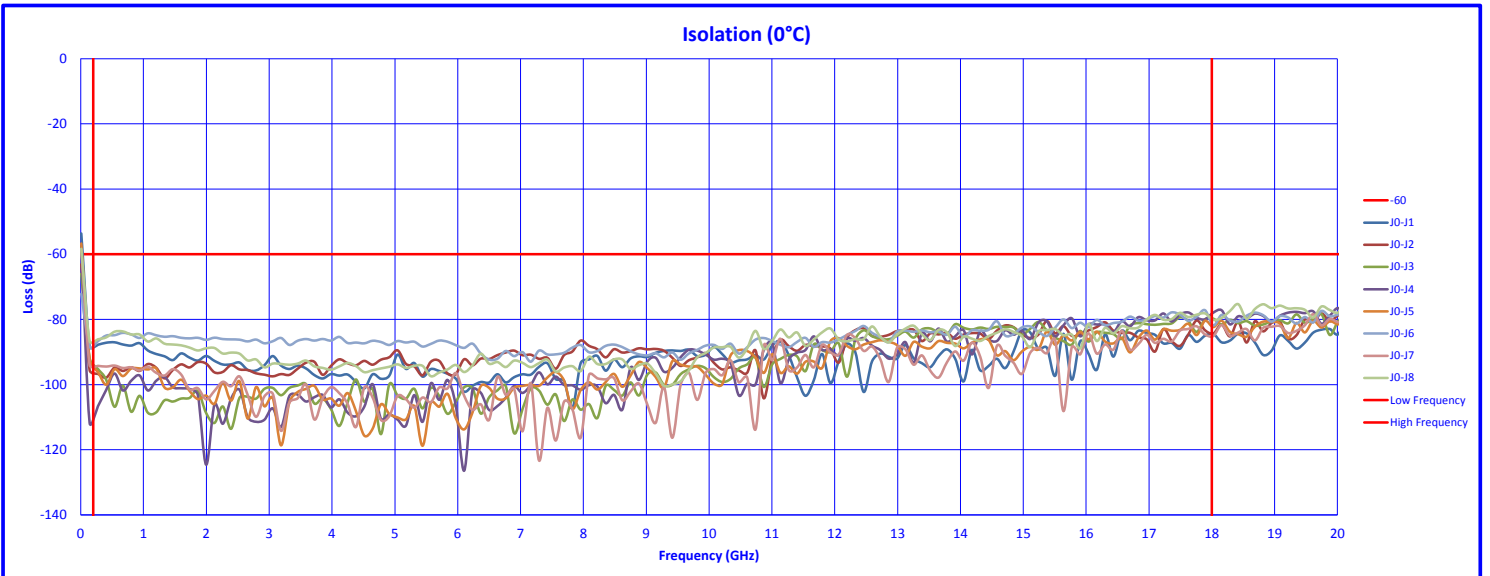
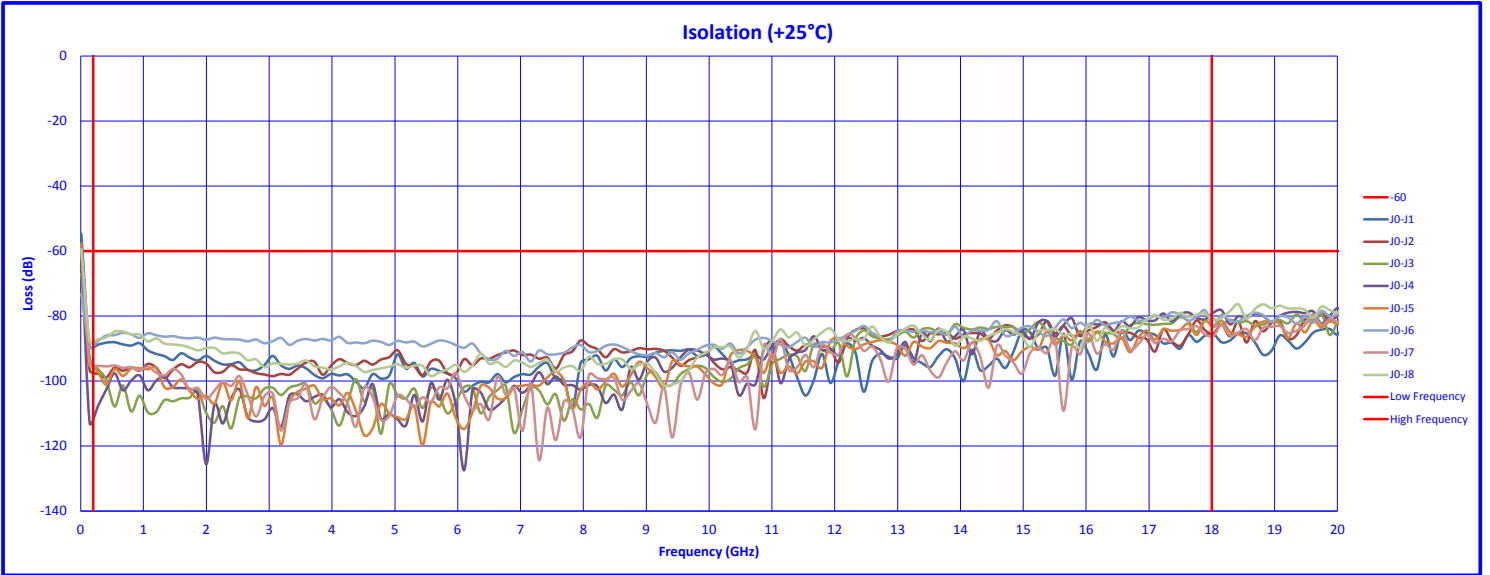


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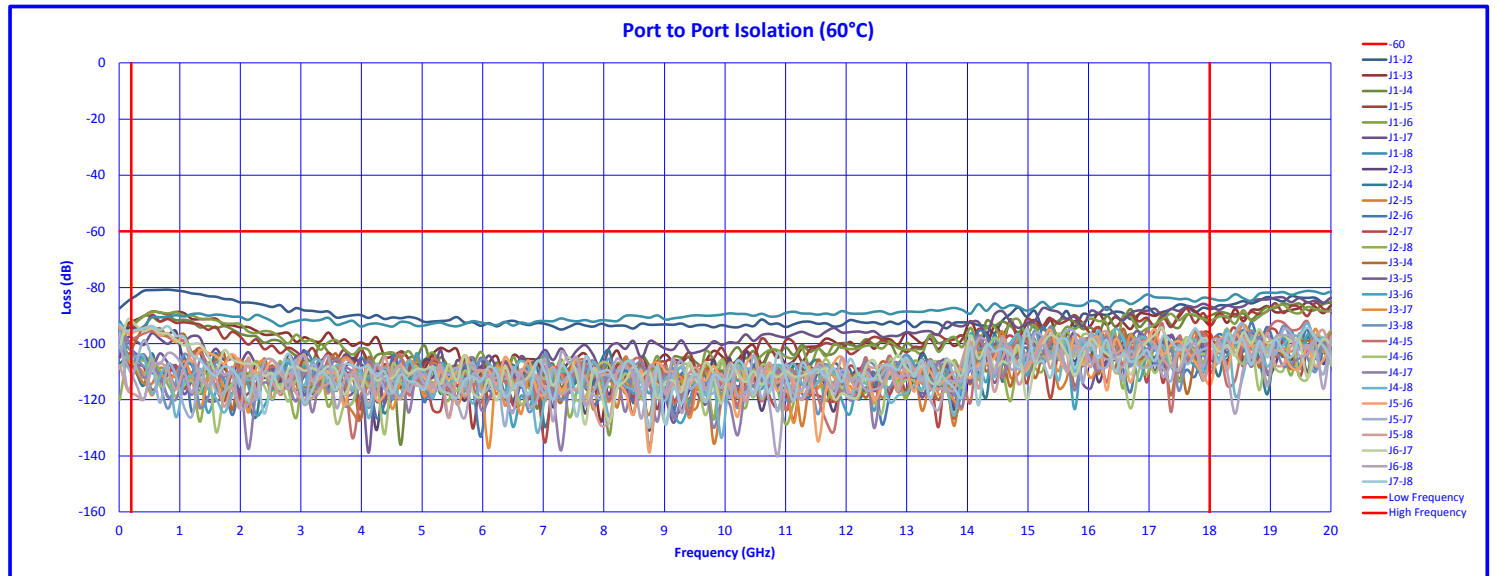
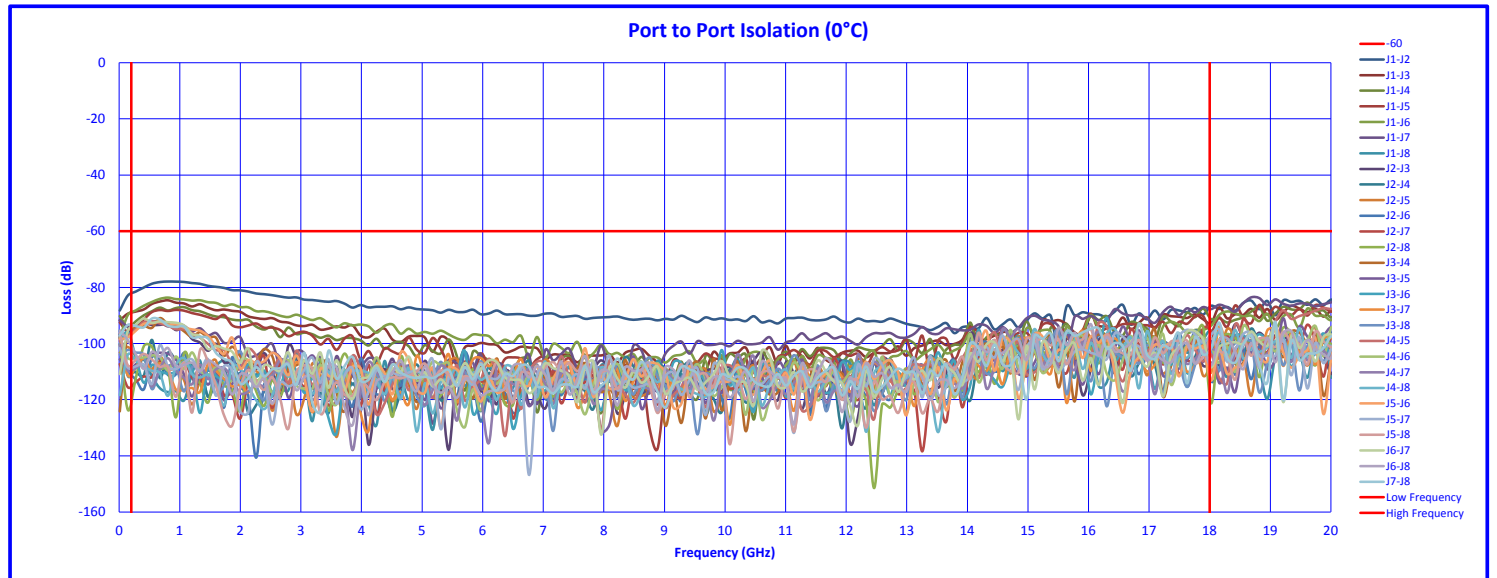
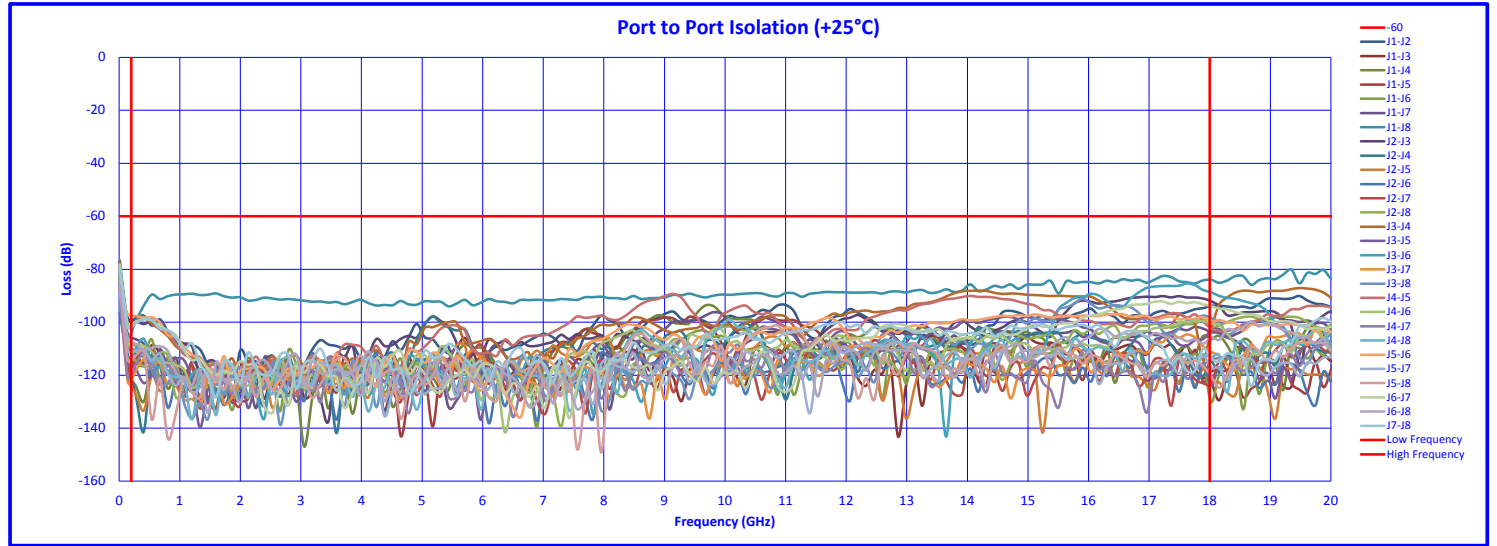


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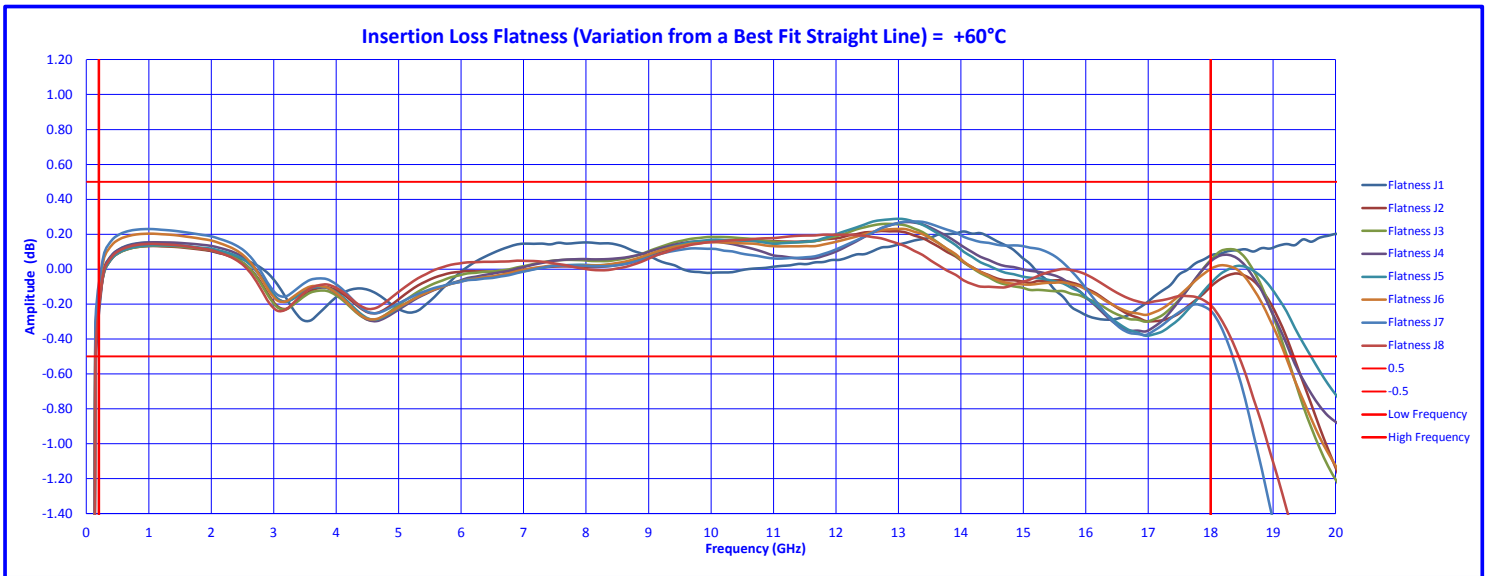
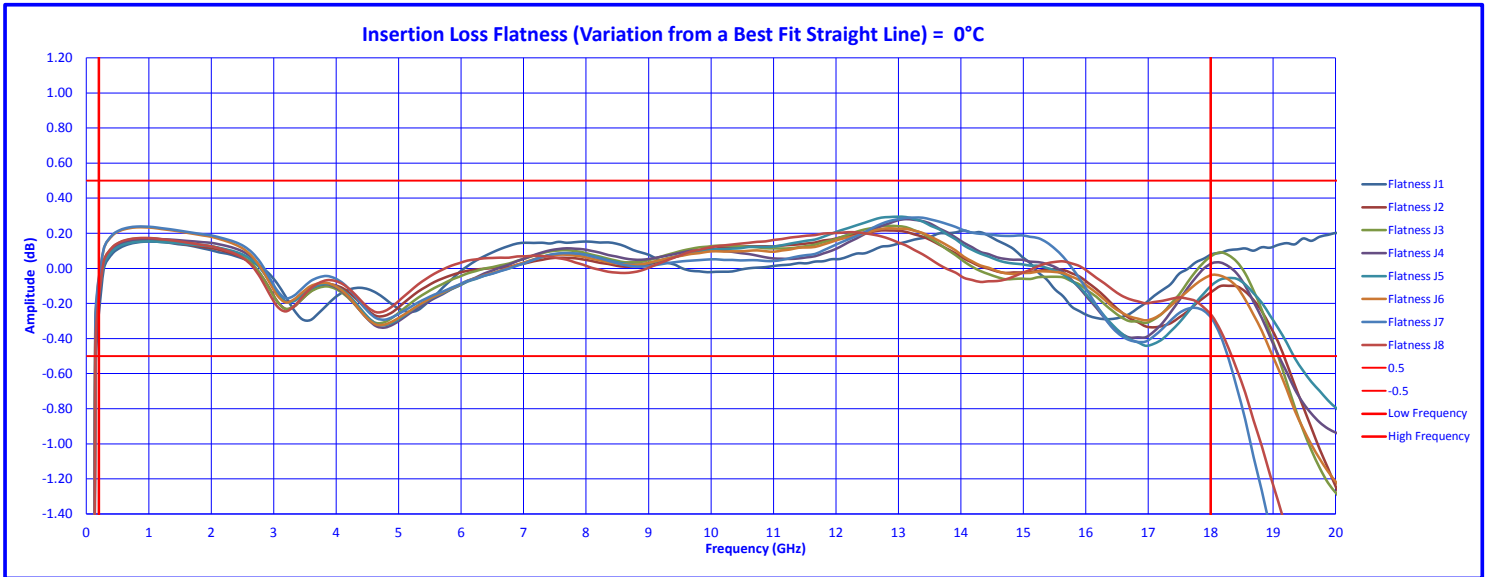
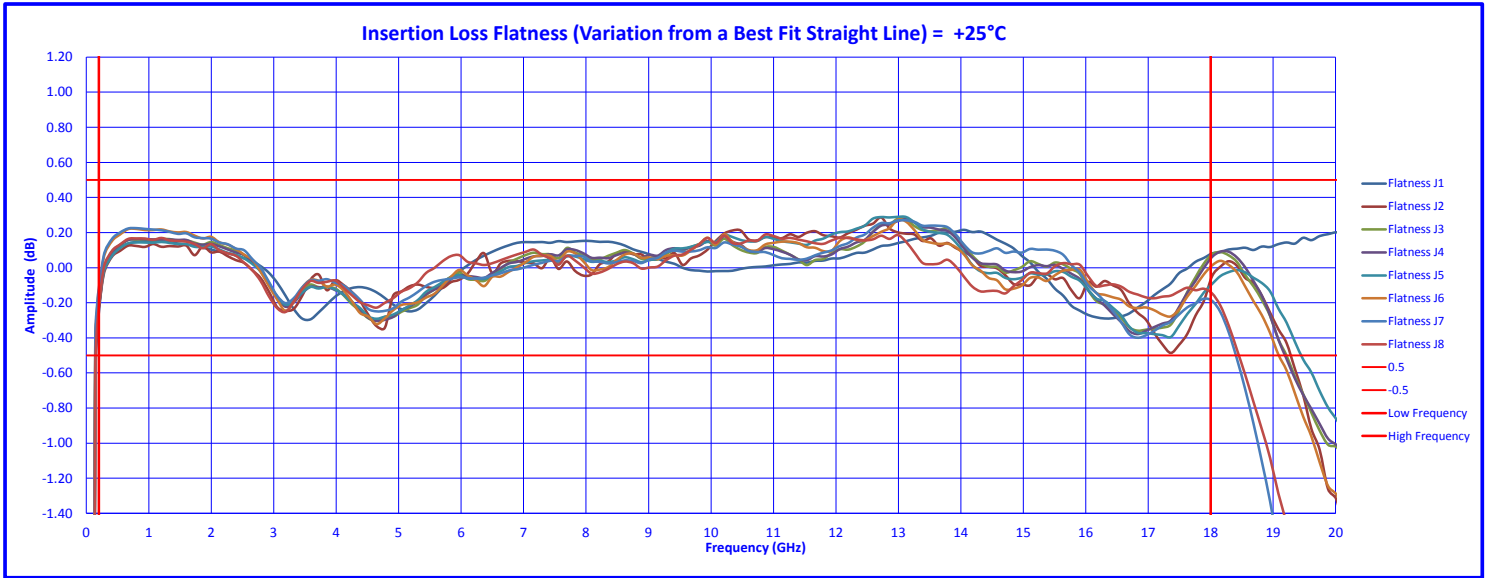


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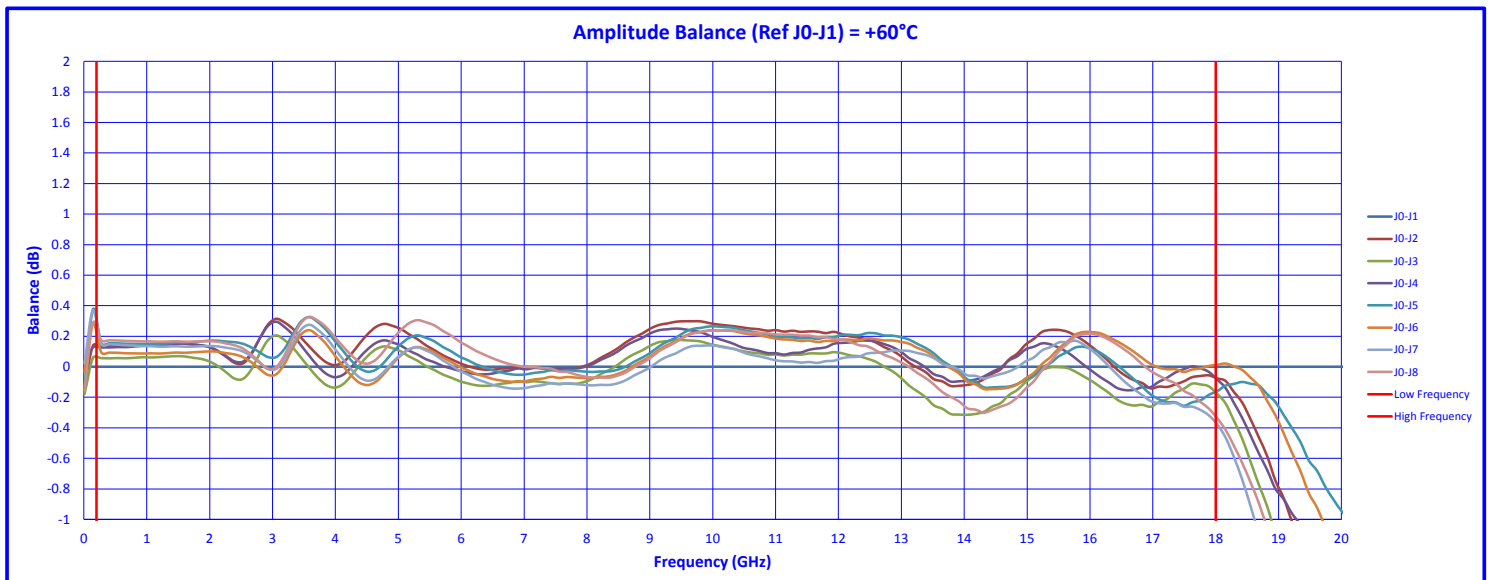
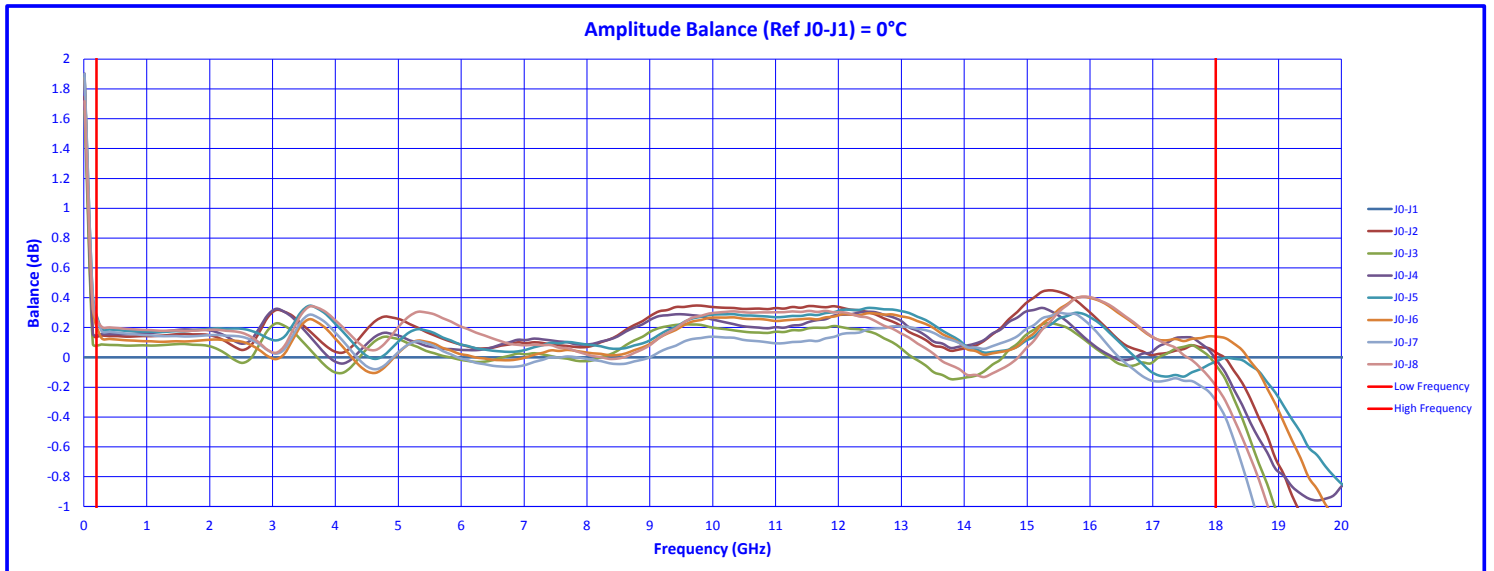
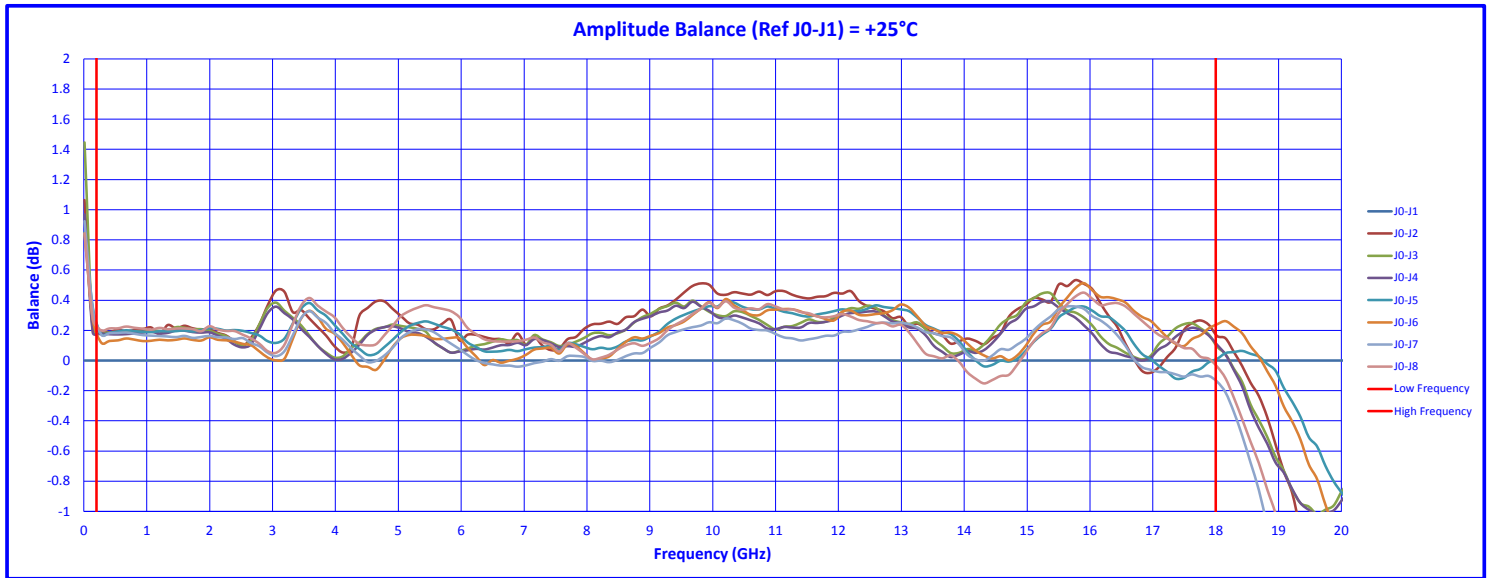


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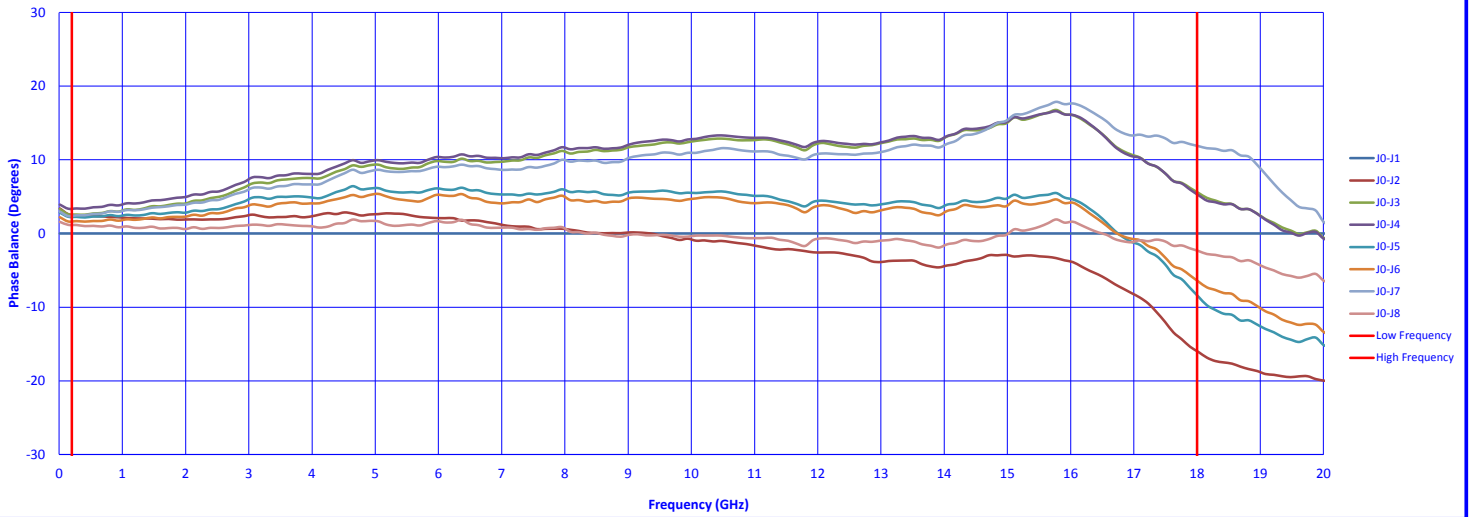
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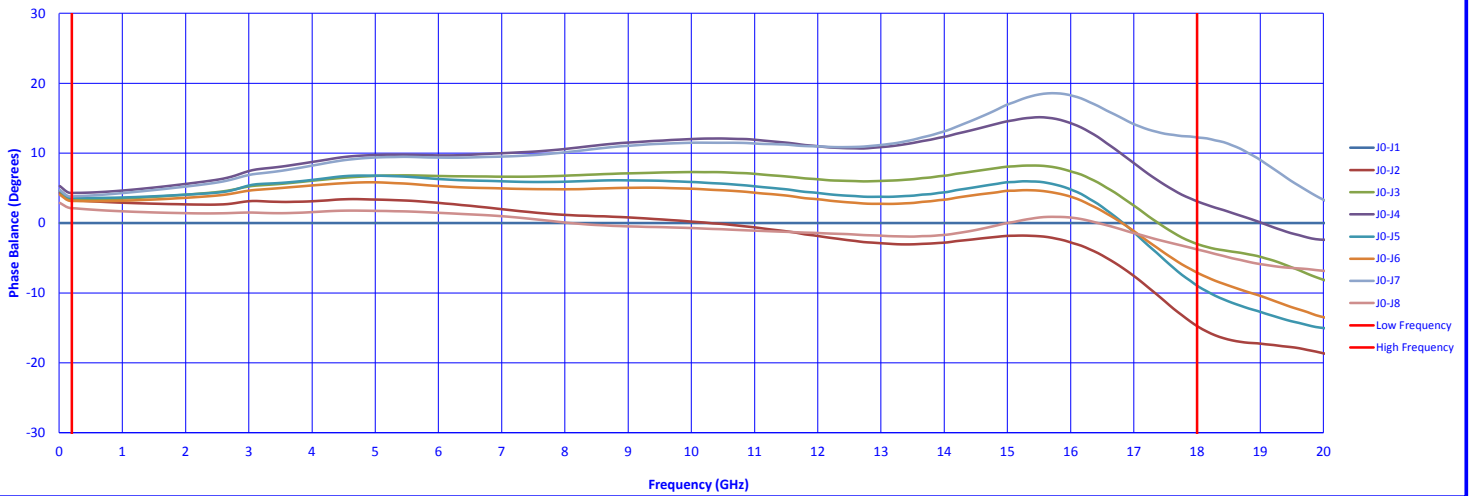


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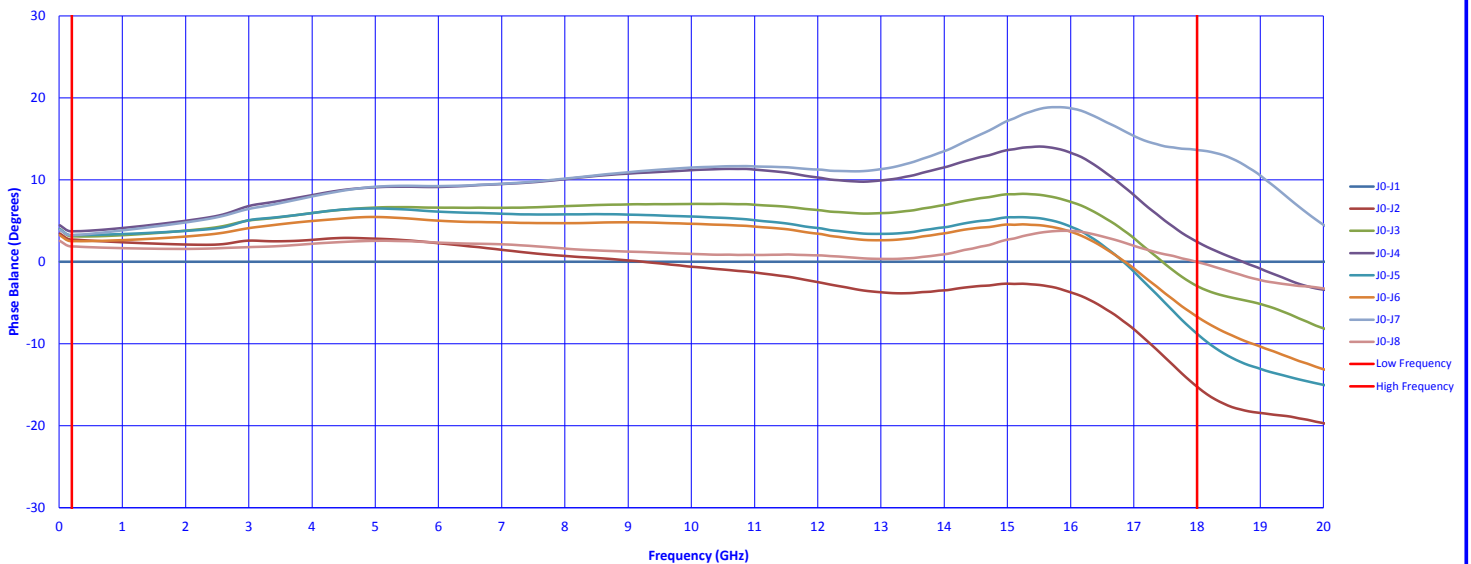
Phase Balance (+25°C)



Phase Balance (0°C)



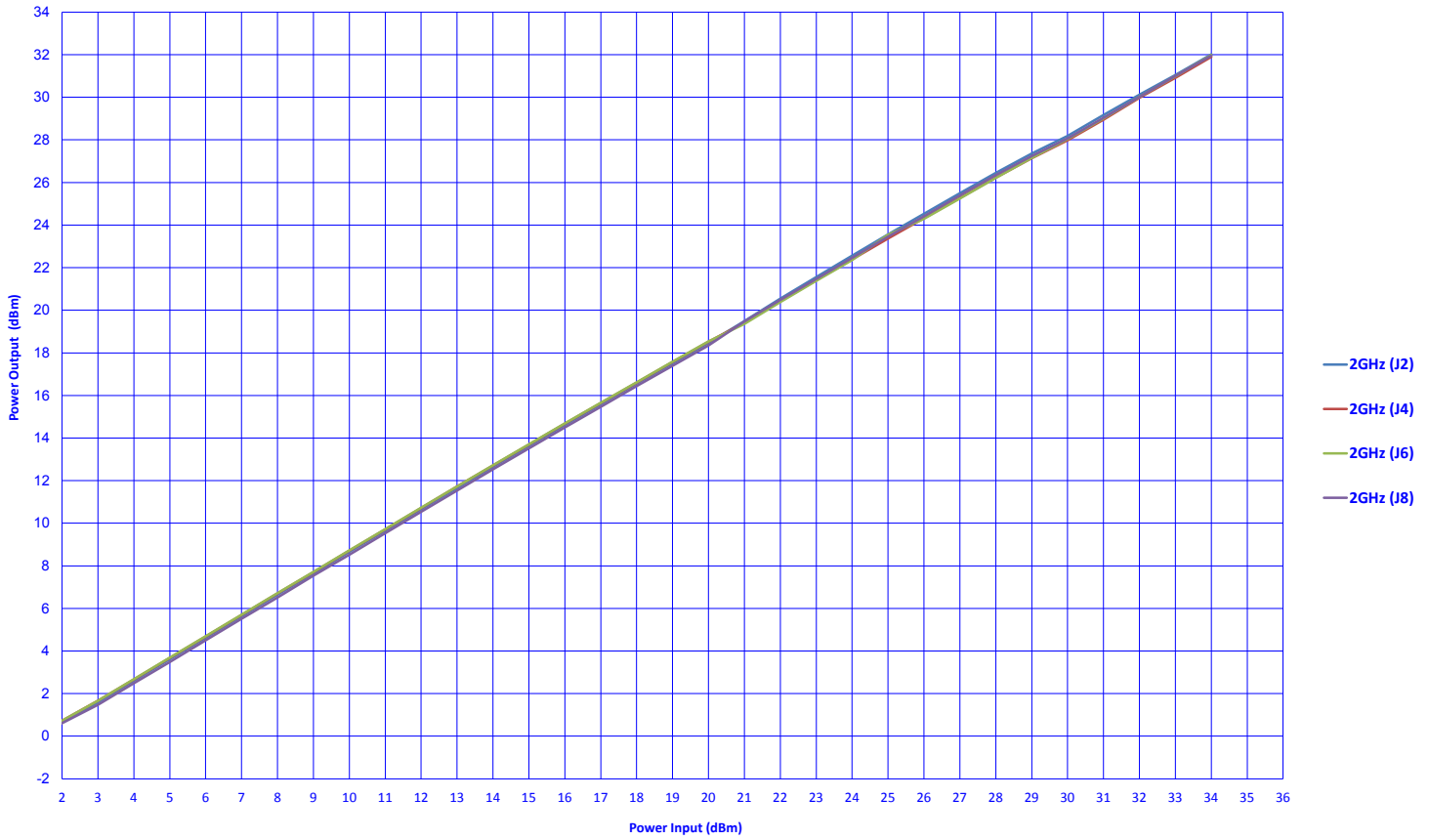
Phase Balance (+60°C)





Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

High Power Test Graph 2 GHz (J2,J4,J6,J8) (+25°C)



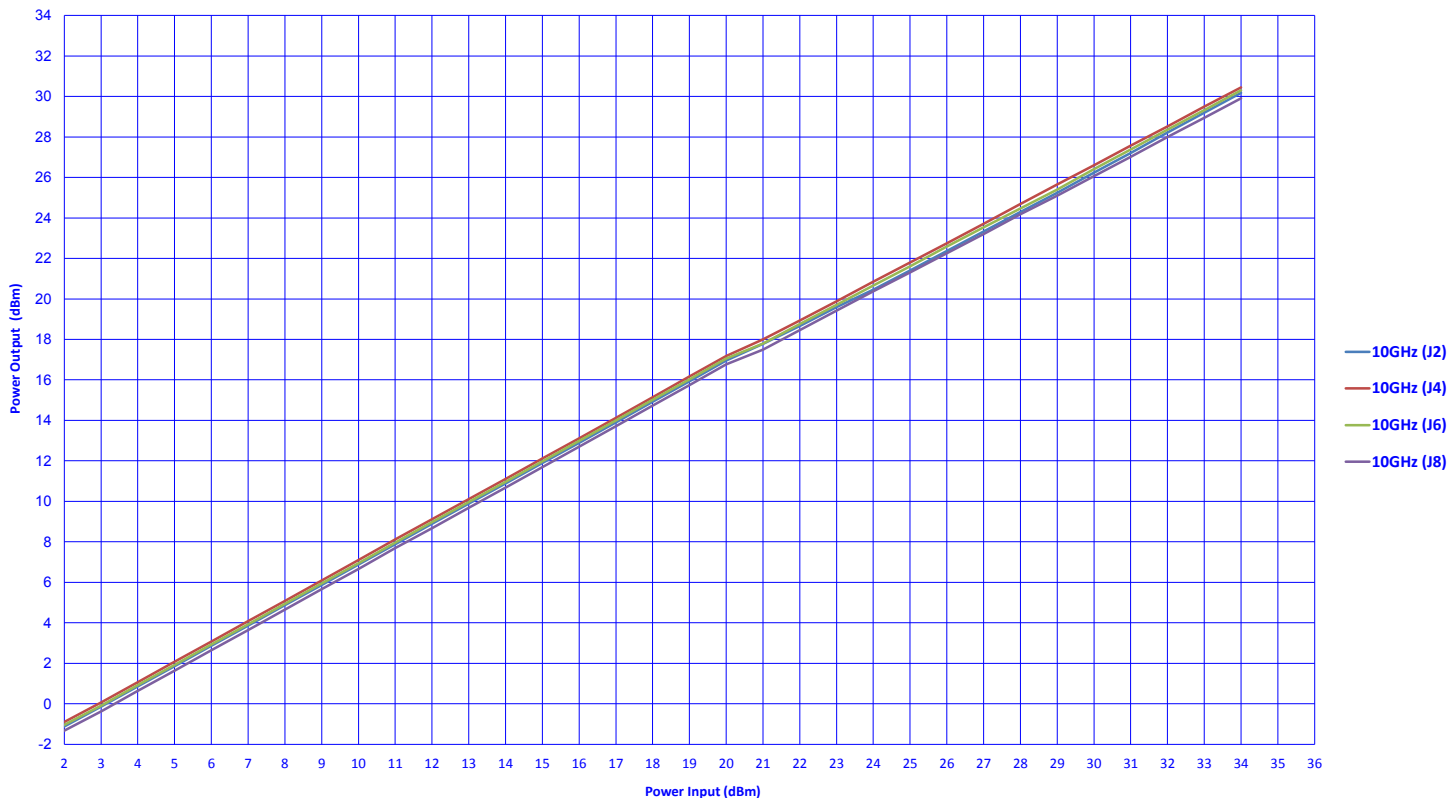
High Power Test Data

2GHz (J2)				2GHz (J4)				2GHz (J6)				2GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	
0	-1.343	1.343	0.000	0	-1.292	1.292	0.000	0	-1.290	1.290	0.000	0	-1.411	1.411	0.000	
1	-0.339	1.339	-0.004	1	-0.287	1.287	-0.006	1	-0.286	1.286	-0.004	1	-0.406	1.406	-0.005	
2	0.671	1.329	-0.014	2	0.724	1.277	-0.016	2	0.726	1.275	-0.016	2	0.603	1.397	-0.014	
3	1.598	1.402	0.059	3	1.662	1.338	0.046	3	1.673	1.327	0.037	3	1.479	1.521	0.110	
4	2.605	1.395	0.052	4	2.668	1.332	0.040	4	2.678	1.322	0.032	4	2.486	1.514	0.103	
5	3.612	1.388	0.045	5	3.674	1.326	0.034	5	3.685	1.315	0.025	5	3.492	1.508	0.097	
6	4.619	1.381	0.038	6	4.682	1.319	0.027	6	4.693	1.308	0.018	6	4.501	1.499	0.088	
7	5.629	1.372	0.029	7	5.690	1.310	0.018	7	5.703	1.297	0.007	7	5.511	1.489	0.078	
8	6.637	1.363	0.020	8	6.698	1.302	0.010	8	6.711	1.290	0.000	8	6.518	1.482	0.071	
9	7.642	1.358	0.015	9	7.705	1.295	0.003	9	7.718	1.282	-0.008	9	7.532	1.468	0.057	
10	8.652	1.348	0.005	10	8.712	1.288	-0.004	10	8.727	1.273	-0.017	10	8.529	1.472	0.061	
11	9.647	1.353	0.010	11	9.711	1.289	-0.003	11	9.723	1.277	-0.013	11	9.533	1.467	0.056	
12	10.655	1.345	0.002	12	10.712	1.288	-0.004	12	10.728	1.272	-0.018	12	10.539	1.461	0.050	
13	11.657	1.343	0.000	13	11.717	1.283	-0.009	13	11.727	1.273	-0.017	13	11.538	1.462	0.051	
14	12.647	1.353	0.010	14	12.707	1.293	0.001	14	12.719	1.281	-0.009	14	12.530	1.470	0.059	
15	13.630	1.370	0.027	15	13.691	1.309	0.017	15	13.703	1.297	0.007	15	13.516	1.484	0.073	
16	14.612	1.388	0.045	16	14.669	1.331	0.039	16	14.683	1.317	0.027	16	14.495	1.505	0.094	
17	15.584	1.416	0.073	17	15.639	1.361	0.069	17	15.656	1.344	0.054	17	15.465	1.535	0.124	
18	16.549	1.451	0.108	18	16.602	1.398	0.106	18	16.619	1.381	0.091	18	16.431	1.569	0.158	
19	17.512	1.488	0.145	19	17.565	1.435	0.143	19	17.582	1.418	0.128	19	17.392	1.608	0.197	
20	18.469	1.531	0.188	20	18.518	1.482	0.190	20	18.535	1.465	0.175	20	18.349	1.651	0.240	
21	19.49	1.510	0.167	21	19.41	1.590	0.298	21	19.36	1.640	0.350	21	19.47	1.530	0.119	
22	20.55	1.450	0.107	22	20.43	1.570	0.278	22	20.39	1.610	0.320	22	20.49	1.510	0.099	
23	21.56	1.440	0.097	23	21.42	1.580	0.288	23	21.38	1.620	0.330	23	21.47	1.530	0.119	
24	22.56	1.440	0.097	24	22.39	1.610	0.318	24	22.36	1.640	0.350	24	22.45	1.550	0.139	
25	23.55	1.450	0.107	25	23.37	1.630	0.338	25	23.54	1.460	0.170	25	23.46	1.540	0.129	
26	24.52	1.480	0.137	26	24.32	1.680	0.388	26	24.29	1.710	0.420	26	24.41	1.590	0.179	
27	25.49	1.510	0.167	27	25.28	1.720	0.428	27	25.25	1.750	0.460	27	25.39	1.610	0.199	
28	26.45	1.550	0.207	28	26.23	1.770	0.478	28	26.22	1.780	0.490	28	26.34	1.660	0.249	
29	27.36	1.640	0.297	29	27.14	1.860	0.568	29	27.16	1.840	0.550	29	27.24	1.760	0.349	
30	28.18	1.820	0.477	30	27.98	2.020	0.728	30	28.03	1.970	0.680	30	28.06	1.940	0.529	1 Watt
31	29.16	1.840	0.497	31	28.95	2.050	0.758	31	29.01	1.990	0.700	31	29.04	1.960	0.549	1.26 Watt
32	30.12	1.880	0.537	32	29.98	2.020	0.728	32	30.02	1.980	0.690	32	30.02	1.980	0.569	1.6 Watt
33	31.05	1.950	0.607	33	30.92	2.080	0.788	33	30.98	2.020	0.730	33	31.00	2.000	0.589	2 Watt
34	32.02	1.980	0.637	34	31.90	2.100	0.808	34	31.99	2.010	0.720	34	31.95	2.050	0.639	2.5 Watt
Do not Exceed				Do not Exceed				Do not Exceed				Do not Exceed				



Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

High Power Test Graph 10 GHz (J2,J4,J6,J8) (+25°C)



High Power Test Data																
10GHz (J2)				10GHz (J4)				10GHz (J6)				10GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	
0	-3.115	3.115	0.000	0	-2.897	2.897	0.000	0	-3.047	3.047	0.000	0	-3.338	3.338	0.000	
1	-2.116	3.116	0.001	1	-1.896	2.896	-0.001	1	-2.044	3.044	-0.003	1	-2.335	3.335	-0.004	
2	-1.117	3.117	0.002	2	-0.893	2.893	-0.004	2	-1.044	3.044	-0.003	2	-1.332	3.332	-0.006	
3	-0.147	3.147	0.032	3	0.064	2.936	0.039	3	-0.086	3.086	0.039	3	-0.371	3.371	0.033	
4	0.853	3.147	0.032	4	1.068	2.932	0.035	4	0.917	3.083	0.036	4	0.631	3.369	0.031	
5	1.857	3.143	0.028	5	2.073	2.927	0.030	5	1.923	3.077	0.030	5	1.637	3.363	0.025	
6	2.861	3.139	0.024	6	3.078	2.922	0.025	6	2.933	3.070	0.023	6	2.648	3.357	0.019	
7	3.863	3.137	0.022	7	4.080	2.920	0.023	7	3.933	3.067	0.020	7	3.648	3.352	0.014	
8	4.866	3.134	0.019	8	5.086	2.914	0.017	8	4.940	3.060	0.013	8	4.653	3.347	0.009	
9	5.871	3.129	0.014	9	6.091	2.909	0.012	9	5.946	3.054	0.007	9	5.660	3.340	0.002	
10	6.875	3.125	0.010	10	7.107	2.893	-0.004	10	6.951	3.049	0.002	10	6.665	3.335	-0.003	
11	7.881	3.119	0.004	11	8.111	2.889	-0.008	11	7.957	3.043	-0.004	11	7.681	3.319	-0.019	
12	8.883	3.117	0.002	12	9.107	2.893	-0.004	12	8.967	3.033	-0.014	12	8.677	3.323	-0.015	
13	9.884	3.116	0.001	13	10.112	2.888	-0.009	13	9.969	3.032	-0.016	13	9.686	3.314	-0.024	
14	10.882	3.118	0.003	14	11.108	2.892	-0.005	14	10.968	3.032	-0.015	14	10.683	3.317	-0.021	
15	11.896	3.104	-0.011	15	12.117	2.883	-0.014	15	11.975	3.025	-0.022	15	11.688	3.312	-0.026	
16	12.894	3.106	-0.009	16	13.118	2.882	-0.015	16	12.980	3.020	-0.027	16	12.701	3.299	-0.039	
17	13.905	3.095	-0.020	17	14.130	2.870	-0.027	17	13.991	3.009	-0.038	17	13.709	3.291	-0.047	
18	14.920	3.080	-0.035	18	15.144	2.856	-0.041	18	15.003	2.997	-0.050	18	14.723	3.277	-0.061	
19	15.933	3.067	-0.048	19	16.158	2.842	-0.055	19	16.019	2.981	-0.066	19	15.740	3.260	-0.078	
20	16.957	3.043	-0.072	20	17.182	2.818	-0.079	20	17.044	2.956	-0.091	20	16.765	3.235	-0.103	
21	17.780	3.220	0.105	21	18.000	3.000	0.103	21	17.800	3.200	0.153	21	17.500	3.500	0.162	
22	18.670	3.330	0.215	22	18.940	3.060	0.163	22	18.760	3.240	0.193	22	18.460	3.540	0.202	
23	19.600	3.400	0.285	23	19.880	3.120	0.223	23	19.710	3.290	0.243	23	19.420	3.580	0.242	
24	20.450	3.550	0.435	24	20.850	3.150	0.253	24	20.650	3.350	0.303	24	20.370	3.630	0.292	
25	21.400	3.600	0.485	25	21.790	3.210	0.313	25	21.610	3.390	0.343	25	21.300	3.700	0.362	
26	22.360	3.640	0.525	26	22.750	3.250	0.353	26	22.590	3.410	0.363	26	22.250	3.750	0.412	
27	23.330	3.670	0.555	27	23.710	3.290	0.393	27	23.530	3.470	0.423	27	23.210	3.790	0.452	
28	24.290	3.710	0.595	28	24.690	3.310	0.413	28	24.460	3.540	0.493	28	24.180	3.820	0.482	
29	25.250	3.750	0.635	29	25.660	3.340	0.443	29	25.400	3.600	0.553	29	25.100	3.900	0.562	
30	26.240	3.760	0.645	30	26.600	3.400	0.503	30	26.410	3.590	0.543	30	26.060	3.940	0.602	1 Watt
31	27.200	3.800	0.685	31	27.570	3.430	0.533	31	27.380	3.620	0.573	31	27.020	3.980	0.642	1.26 Watt
32	28.220	3.780	0.665	32	28.520	3.480	0.583	32	28.350	3.650	0.603	32	28.000	4.000	0.662	1.6 Watt
33	29.200	3.800	0.685	33	29.490	3.510	0.613	33	29.330	3.670	0.623	33	28.950	4.050	0.712	2 Watt
34	30.180	3.820	0.705	34	30.460	3.560	0.653	34	30.3	3.700	0.653	34	29.900	4.100	0.762	2.5 Watt
Do not Exceed				Do not Exceed				Do not Exceed				Do not Exceed				



Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

High Power Test Graph 18 GHz (J2,J4,J6,J8) (+25°C)

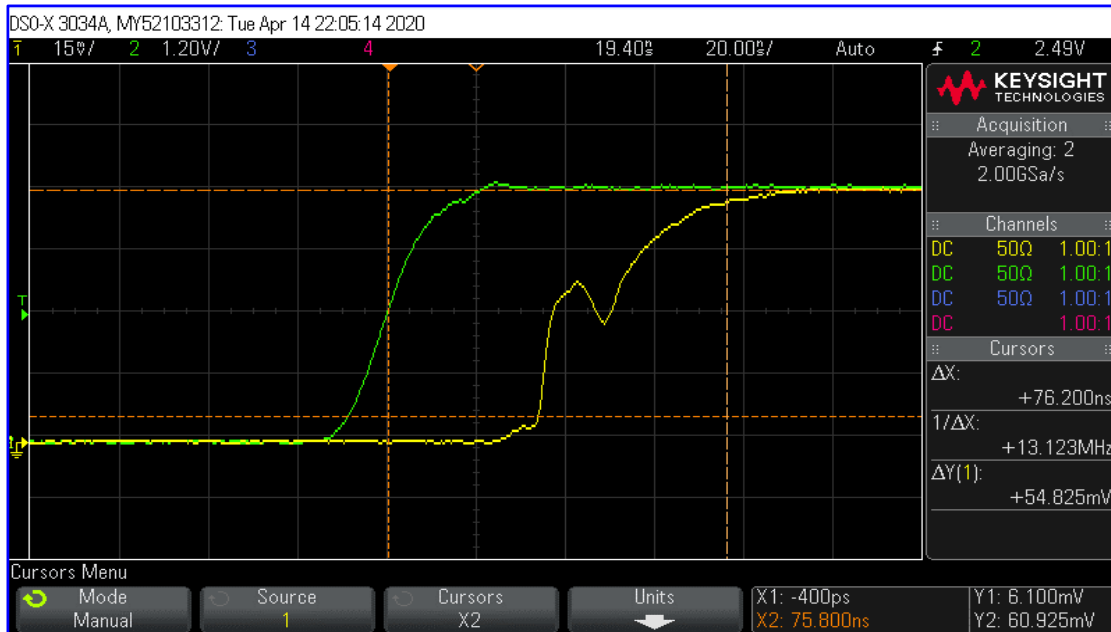


High Power Test Data And P1dB																
18GHz (J2)				18GHz (J4)				18GHz (J6)				18GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	
0	-3.919	3.919	-0.001	0	-3.780	3.780	0.000	0	-4.155	4.155	0.000	0	-4.417	4.417	0.000	
1	-2.932	3.932	0.013	1	-2.793	3.793	0.013	1	-3.167	4.167	0.012	1	-3.431	4.431	0.014	
2	-1.940	3.940	0.021	2	-1.802	3.802	0.022	2	-2.177	4.177	0.022	2	-2.439	4.439	0.022	
3	-0.921	3.921	0.002	3	-0.752	3.752	-0.028	3	-1.151	4.151	-0.004	3	-1.508	4.508	0.009	
4	0.066	3.934	0.015	4	0.237	3.763	-0.017	4	-0.161	4.161	0.006	4	-0.516	4.516	0.009	
5	1.060	3.940	0.021	5	1.232	3.768	-0.012	5	0.831	4.169	0.014	5	0.476	4.525	0.108	
6	2.056	3.944	0.025	6	2.230	3.770	-0.010	6	1.829	4.171	0.016	6	1.475	4.525	0.108	
7	3.053	3.948	0.028	7	3.227	3.773	-0.007	7	2.827	4.173	0.018	7	2.476	4.524	0.107	
8	4.053	3.948	0.028	8	4.228	3.773	-0.007	8	3.825	4.175	0.020	8	3.478	4.522	0.105	
9	5.053	3.947	0.028	9	5.229	3.772	-0.009	9	4.825	4.175	0.020	9	4.482	4.518	0.101	
10	6.055	3.945	0.026	10	6.230	3.770	-0.010	10	5.827	4.174	0.018	10	5.487	4.513	0.096	
11	7.057	3.943	0.024	11	7.226	3.774	-0.006	11	6.829	4.172	0.016	11	6.493	4.507	0.090	
12	8.055	3.945	0.026	12	8.228	3.773	-0.007	12	7.822	4.178	0.023	12	7.499	4.501	0.084	
13	9.058	3.942	0.023	13	9.238	3.762	-0.018	13	8.832	4.168	0.013	13	8.507	4.493	0.076	
14	10.063	3.937	0.018	14	10.241	3.759	-0.021	14	9.837	4.163	0.008	14	9.518	4.482	0.065	
15	11.063	3.917	-0.002	15	11.259	3.741	-0.039	15	10.855	4.145	-0.010	15	10.538	4.462	0.045	
16	12.102	3.888	-0.021	16	12.281	3.719	-0.061	16	11.872	4.128	-0.027	16	11.569	4.431	0.014	
17	13.125	3.875	-0.044	17	13.300	3.700	-0.080	17	12.895	4.105	-0.050	17	12.597	4.403	-0.014	
18	14.156	3.844	-0.075	18	14.328	3.672	-0.108	18	13.921	4.079	-0.076	18	13.638	4.362	-0.055	
19	15.197	3.803	-0.116	19	15.363	3.637	-0.143	19	14.960	4.040	-0.115	19	14.685	4.315	-0.102	
20	15.935	4.065	0.146	20	15.920	4.080	0.300	20	15.757	4.243	0.088	20	15.669	4.331	-0.086	
21	16.78	4.220	0.301	21	16.9	4.100	0.320	21	16.25	4.750	0.595	21	16.6	4.400	-0.017	
22	17.82	4.180	0.261	22	17.94	4.060	0.280	22	17.29	4.710	0.555	22	17.7	4.300	-0.117	
23	18.82	4.180	0.261	23	18.95	4.050	0.270	23	18.3	4.700	0.545	23	18.58	4.420	0.003	
24	19.83	4.170	0.251	24	19.97	4.030	0.250	24	19.33	4.670	0.515	24	19.5	4.500	0.083	
25	20.88	4.120	0.201	25	21.01	3.990	0.210	25	20.37	4.630	0.475	25	20.48	4.520	0.103	
26	21.9	4.100	0.181	26	22.03	3.970	0.190	26	21.39	4.610	0.455	26	21.02	4.980	0.563	
27	22.91	4.090	0.171	27	23.04	3.960	0.180	27	22.4	4.600	0.445	27	22.05	4.950	0.533	
28	23.91	4.090	0.171	28	24.04	3.960	0.180	28	23.41	4.590	0.435	28	23.07	4.930	0.513	
29	24.91	4.090	0.171	29	25.03	3.970	0.190	29	24.43	4.570	0.415	29	24.08	4.920	0.503	
30	25.93	4.070	0.151	30	26.07	3.930	0.150	30	25.48	4.520	0.365	30	25.12	4.880	0.463	1 Watt
31	26.9	4.100	0.181	31	27.02	3.980	0.200	31	26.45	4.550	0.395	31	26.1	4.900	0.483	1.26 Watt
32	27.8	4.200	0.281	32	27.98	4.020	0.240	32	27.38	4.620	0.465	32	26.73	5.270	0.853	1.6 Watt
33	28.75	4.250	0.331	33	28.9	4.100	0.320	33	28.30	4.700	0.545	33	27.6	5.400	0.983	2 Watt
34	29.68	4.320	0.401	34	29.85	4.160	0.370	34	29.20	4.800	0.645	34	28.44	5.560	1.143	2.5 Watt
Do not Exceed				Do not Exceed				Do not Exceed				Do not Exceed				

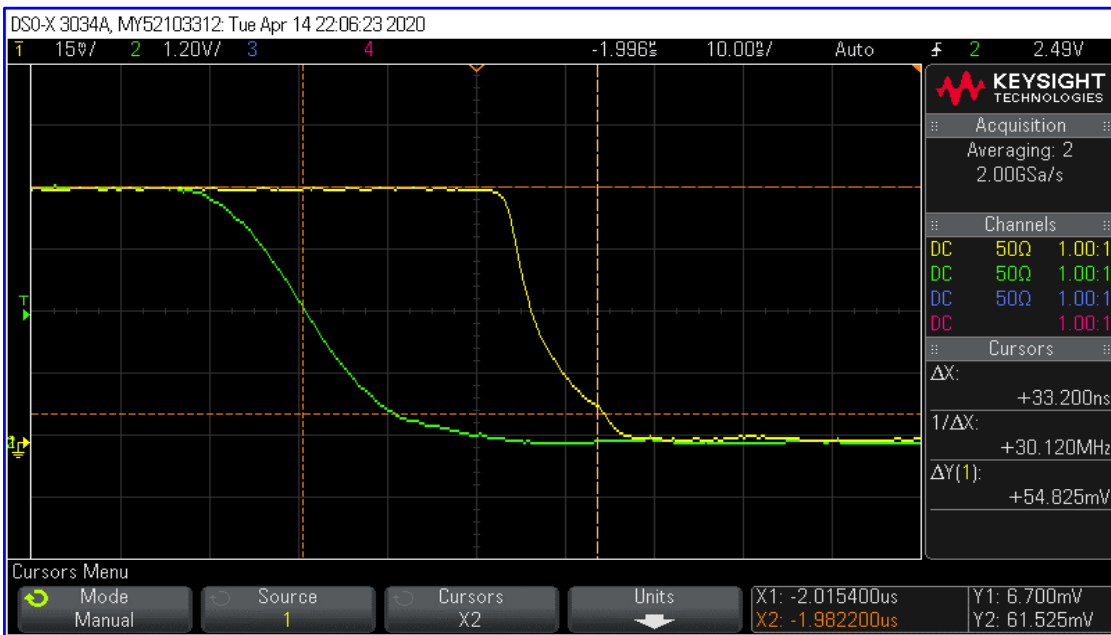


Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Switching Speed ON
20 ns Per Div.



Switching Speed OFF
10 ns Per Div.

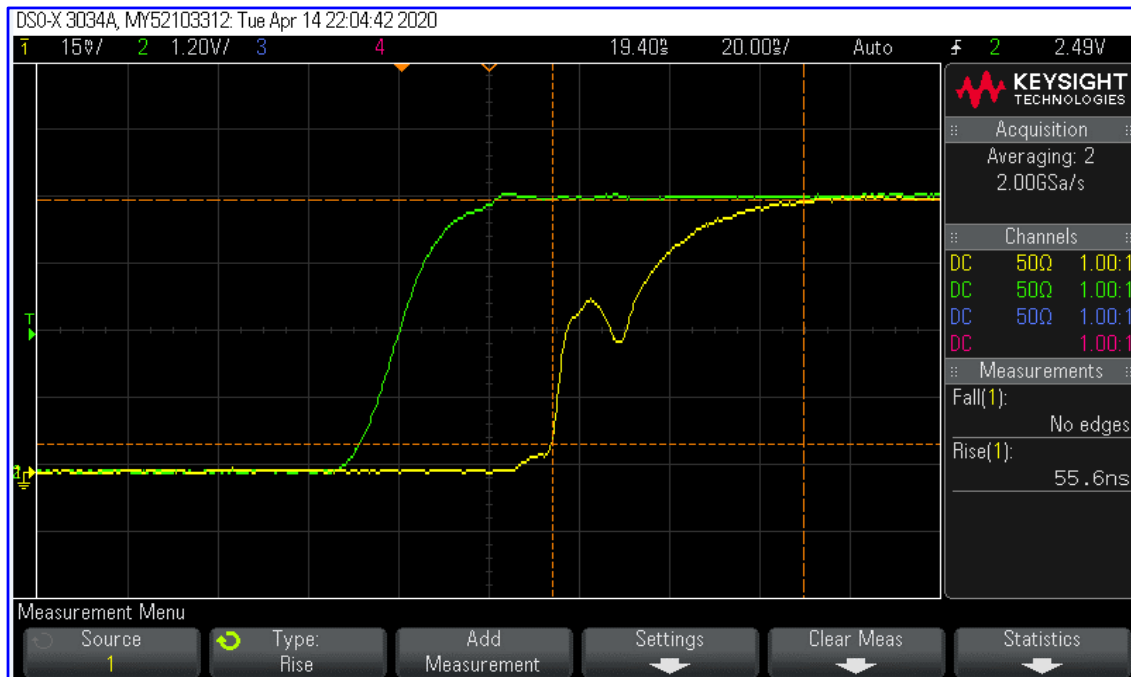


Green Trace = TTL Signal
Yellow Trace = RF Signal

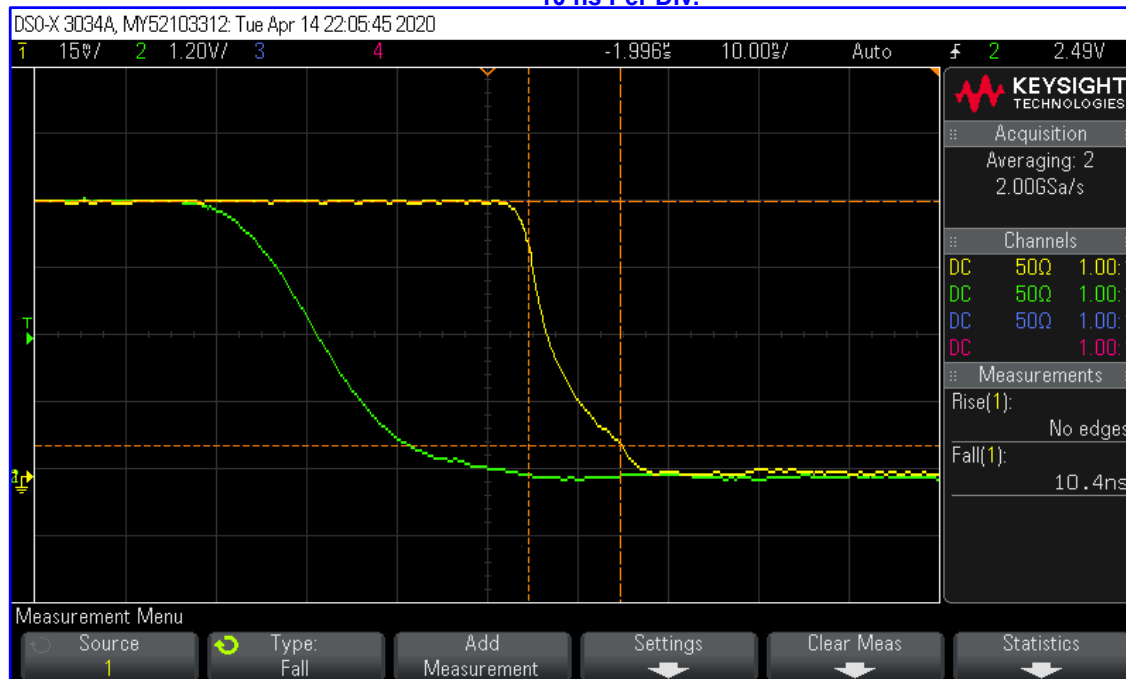


Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Rise Time
20 ns Per Div.



Fall Time
10 ns Per Div.

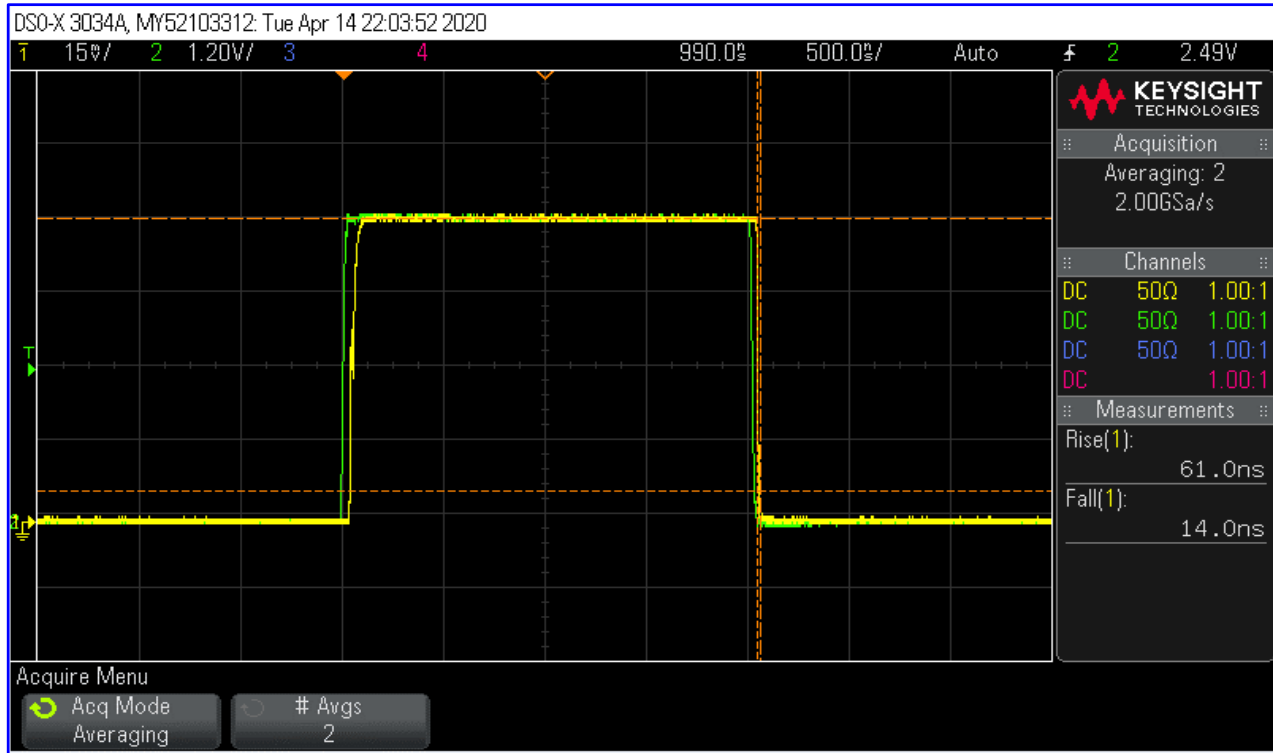


Green Trace = TTL Signal
Yellow Trace = RF Signal



Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Full Pulse
500 ns Per Div.



Green Trace = TTL Signal

Yellow Trace = RF Signal

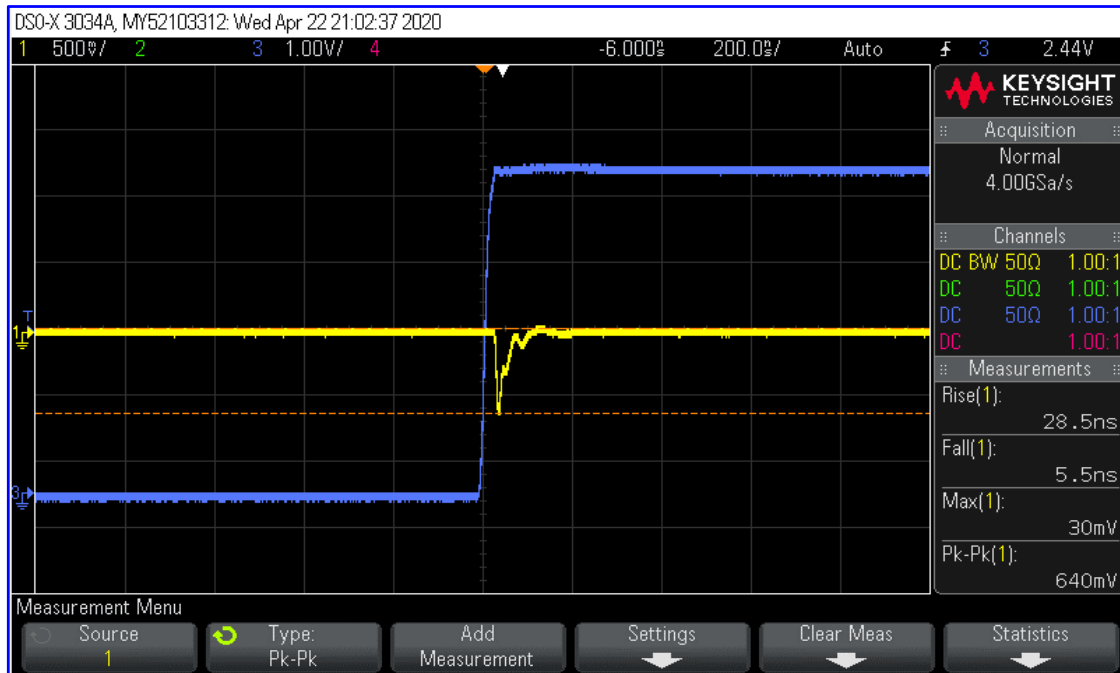


Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Output Video Transients

BW = 350MHz, 50Ω

Measured Value (640mV P-P)



Output Video Transients

BW = 350MHz, 50Ω

Measured Value (820 mV P-P)

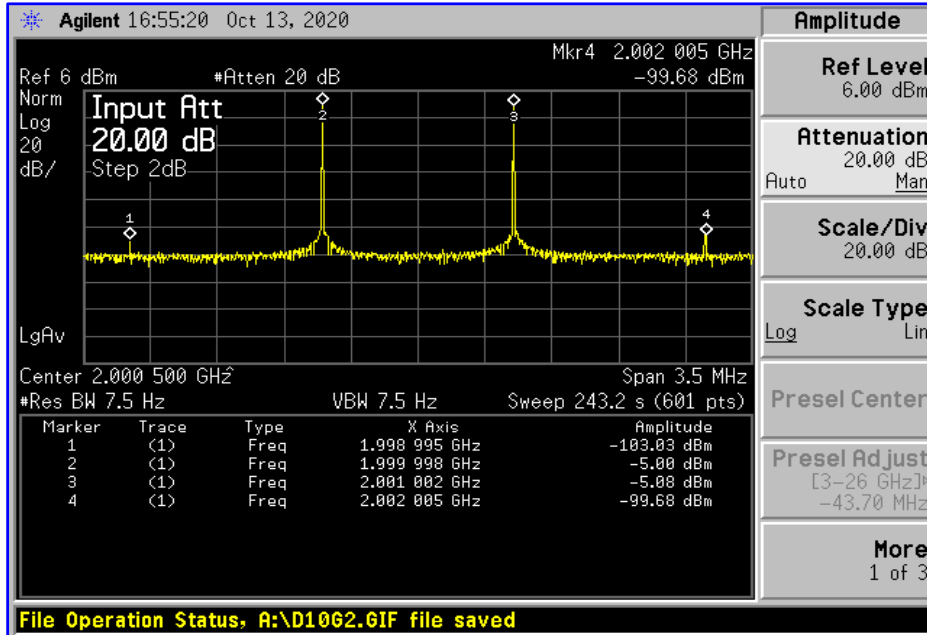


TTL Signal (Trigger) = Blue
Video Signal = Yellow



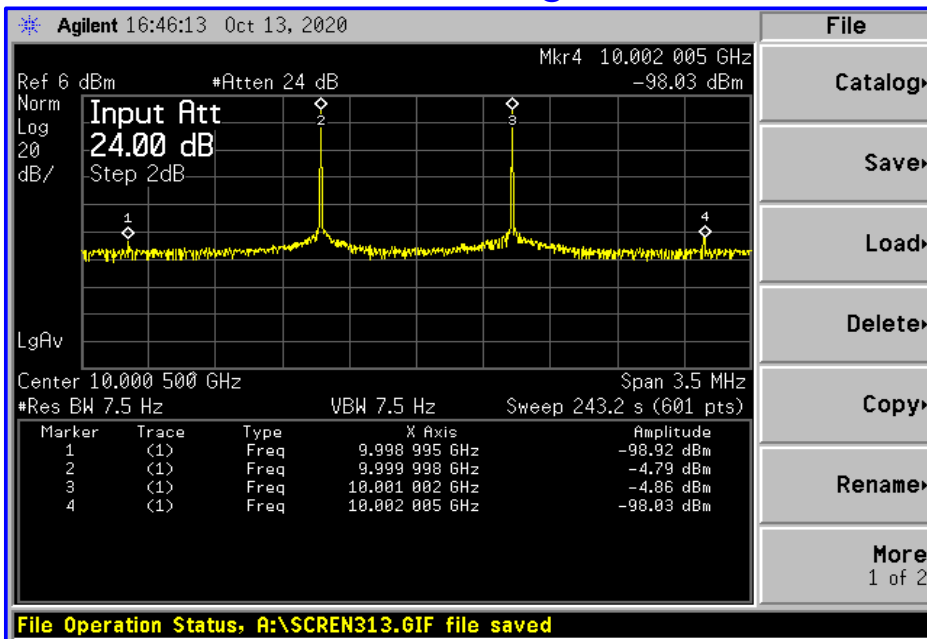
Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

IIP3 And OIP3 @ 2GHz



OIP3 = Pout +dBc/2 **42.23 dBm**
 IIP3 = OIP3 - Gain **43.23 dBm**

IIP3 And OIP3 @ 10GHz

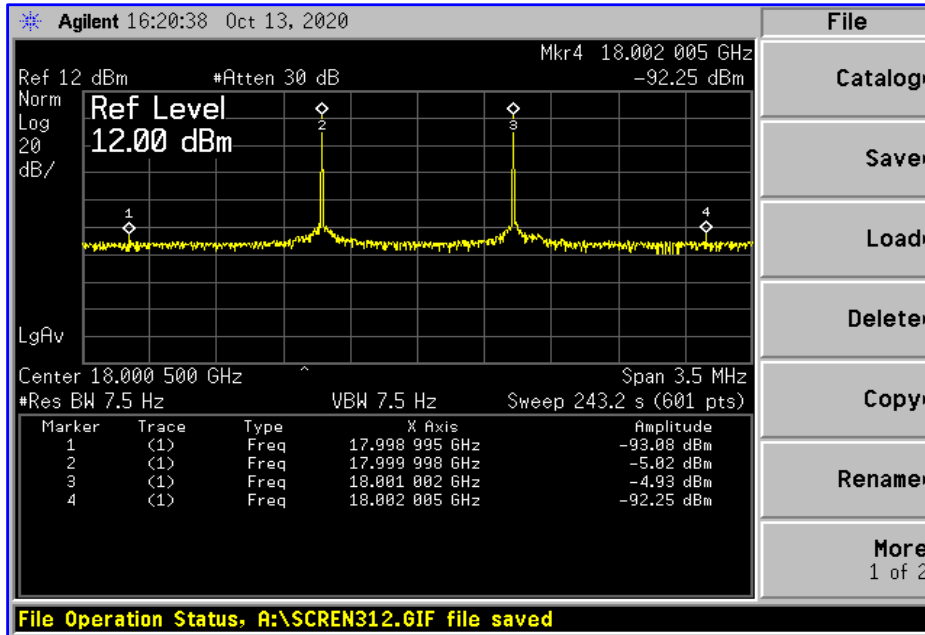


OIP3 = Pout +dBc/2 **41.66 dBm**
 IIP3 = OIP3 - Gain **44.16 dBm**



Typical Characteristics ON P8T-200M18-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

IIP3 And OIP3 @ 18GHz



OIP3 = Pout +dBc/2 **38.73 dBm**
 IIP3 = OIP3 - Gain **42.23 dBm**