



SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL38728/2248

Customer: _____	Tested By: <u>RCombs</u>
SO No: _____	Temperature: <u>+25° C</u>
Model No: <u>SDLVA-6G18G-CD-2-OPT218</u>	Date: <u>12/14/2022</u>
Serial No: <u>PL38728/2248</u>	Drawing No: <u>27623906</u> Rev: <u>A1</u>

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC	
1	Frequency:	2.0 GHz – 18.0 GHz	2.0 GHz – 18.0 GHz See Plots	PMI QA2	
2	Flatness:	± 2.0 dB Maximum	±1.4 dB 25°C See Plots		
3	TSS:	-70 dBm Minimum	-72 dBm		
4	VSWR:	2.0:1 (Input)	1.7:1 (Input)		
5	Power Input:	+17 dBm CW Maximum	Pass		
6	RF Out:	+13 dBm ±3 dB Typical	11.01 dBm Avg.		
7	Log Slope:	25 mV/dB (±10%) 50Ω	25 mV/dB See Plots		
8	Log Range:	-70 to +5 dBm	-70 to +5 dBm See Plots		
9	Log Linearity:	±2.5 dB (-40°C - +85°C)	±1.2 dB See Plots		
10	Pulse Range:	30 ns to CW	Pass		
11	Rise Time:	10 ns (6 ns Typical)	6.5 ns		
12	Recovery Time:	60 ns Typical	59.0 ns		
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 233 mA -12V @ 94 mA		PMI QA2

QA/QC Approval:  PMI QA2

Date: 12/16/2022



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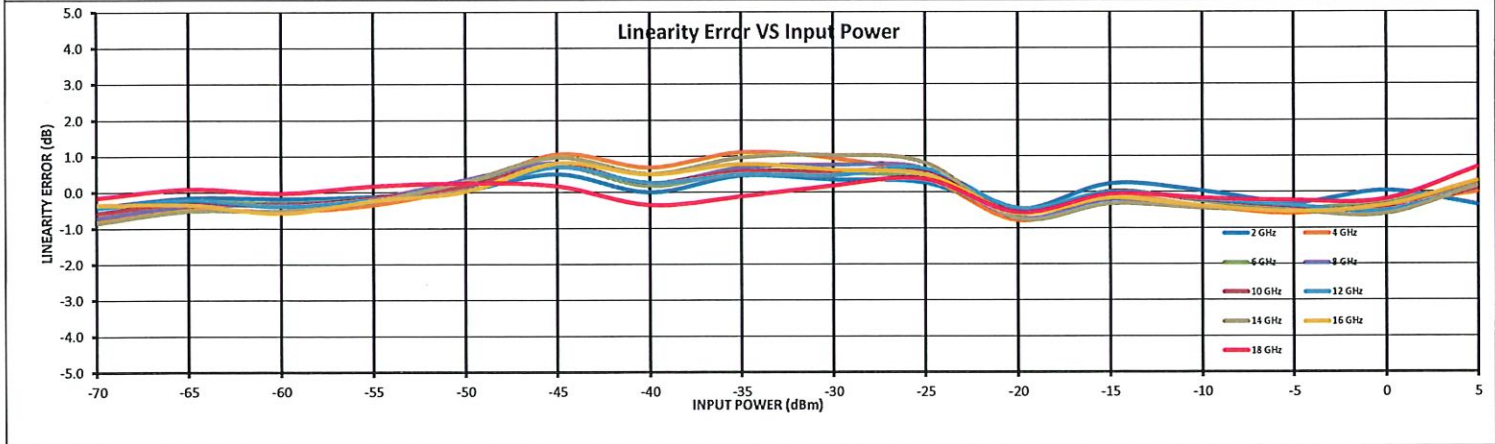
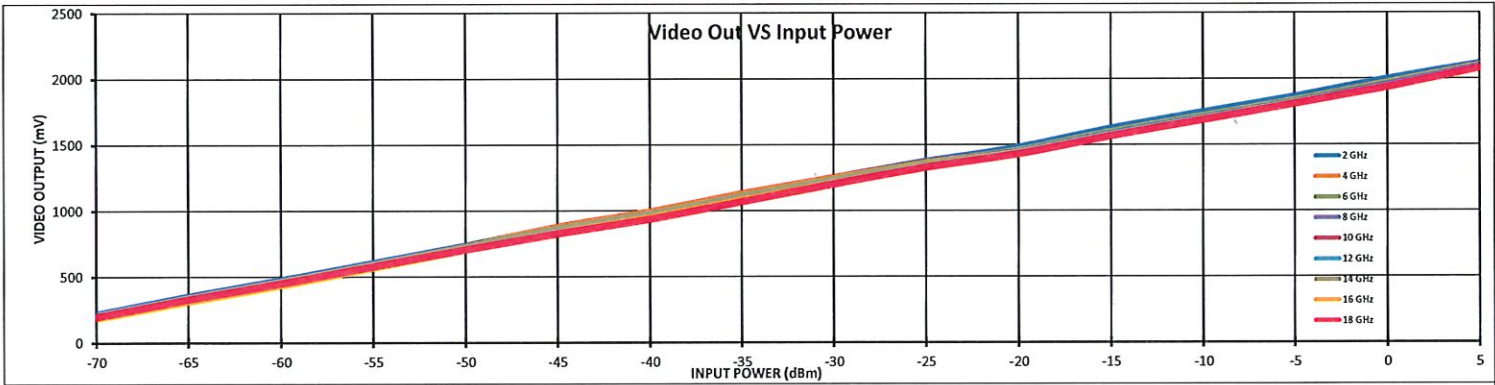
PL38728/2248

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL38728/2248
 Date: 12/14/2022
 Tested By: RCombs
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	2004	25.3	0.5	224	357	483	611	742	879	993	1131	1254	1379	1486	1631	1752	1870	2005	2121	Measured Value (mV)
				-10	-4	-4	-3	2	13	0	12	9	7	-12	6	1	-8	1	-9	Error (mV)
				-0.41	-0.15	-0.17	-0.12	0.07	0.51	0.00	0.47	0.35	0.26	-0.49	0.24	0.03	-0.30	0.04	-0.35	LINEARITY ERROR (dB)
4 GHz	1984	25.0	1.1	212	345	469	598	736	884	1000	1135	1256	1369	1463	1605	1724	1844	1976	2109	Measured Value (mV)
				-20	-12	-13	-9	4	27	17	28	23	11	-20	-3	-10	-15	-8	0	Error (mV)
				-0.79	-0.47	-0.53	-0.35	0.16	1.06	0.69	1.11	0.94	0.43	-0.79	-0.14	-0.39	-0.60	-0.33	-0.01	LINEARITY ERROR (dB)
6 GHz	1976	25.0	0.7	213	346	470	599	734	871	981	1116	1240	1361	1461	1602	1720	1839	1970	2104	Measured Value (mV)
				-14	-6	-7	-4	7	19	5	15	13	9	-15	0	-6	-12	-5	3	Error (mV)
				-0.57	-0.26	-0.29	-0.15	0.26	0.74	0.19	0.59	0.53	0.38	-0.61	0.02	-0.25	-0.47	-0.24	0.14	LINEARITY ERROR (dB)
8 GHz	1966	24.8	0.8	215	348	473	600	737	872	982	1117	1242	1363	1453	1690	1708	1829	1957	2097	Measured Value (mV)
				-18	-9	-8	-4	9	20	6	17	19	16	-18	-5	-10	-13	-9	7	Error (mV)
				-0.71	-0.37	-0.32	-0.16	0.35	0.81	0.26	0.69	0.76	0.64	-0.72	-0.20	-0.42	-0.53	-0.38	0.29	LINEARITY ERROR (dB)
10 GHz	1956	24.8	0.8	204	336	457	587	719	858	970	1102	1225	1351	1447	1584	1702	1822	1944	2083	Measured Value (mV)
				-15	-7	-9	-4	4	19	6	15	13	15	-13	0	-6	-10	-12	3	Error (mV)
				-0.59	-0.27	-0.37	-0.16	0.17	0.76	0.26	0.59	0.53	0.61	-0.52	0.00	-0.22	-0.41	-0.49	0.11	LINEARITY ERROR (dB)
12 GHz	1952	24.9	0.7	196	326	446	575	706	847	961	1091	1215	1345	1442	1578	1697	1817	1939	2080	Measured Value (mV)
				-11	-5	-10	-5	1	18	7	12	12	16	-11	0	-5	-10	-13	4	Error (mV)
				-0.43	-0.21	-0.39	-0.20	0.03	0.71	0.27	0.49	0.47	0.66	-0.45	0.00	-0.20	-0.38	-0.52	0.16	LINEARITY ERROR (dB)
14 GHz	1952	24.6	1.0	208	339	462	592	729	868	980	1114	1239	1357	1442	1575	1695	1816	1937	2080	Measured Value (mV)
				-21	-13	-13	-6	7	24	13	24	25	20	-18	-8	-11	-13	-16	4	Error (mV)
				-0.85	-0.51	-0.51	-0.24	0.30	0.98	0.51	0.97	1.02	0.81	-0.74	-0.32	-0.45	-0.53	-0.61	0.18	LINEARITY ERROR (dB)
16 GHz	1957	25.3	0.8	176	303	423	559	692	838	957	1091	1213	1336	1436	1573	1694	1817	1948	2092	Measured Value (mV)
				-9	-9	-15	-6	1	21	13	20	16	12	-15	-4	-10	-14	-9	8	Error (mV)
				-0.34	-0.34	-0.58	-0.23	0.02	0.81	0.50	0.79	0.62	0.48	-0.58	-0.16	-0.39	-0.55	-0.37	0.32	LINEARITY ERROR (dB)
18 GHz	1939	24.8	0.7	196	326	448	577	703	825	937	1066	1198	1327	1428	1565	1686	1809	1934	2080	Measured Value (mV)
				-4	2	-1	4	6	4	-9	-3	4	9	-14	-1	-4	-6	-5	17	Error (mV)
				-0.16	0.09	-0.03	0.17	0.26	0.18	-0.36	-0.12	0.18	0.36	-0.57	-0.06	-0.17	-0.24	-0.20	0.69	LINEARITY ERROR (dB)
Avg. Slope: 25 mV/dB				1	1.1	1.2	1	1	1.2	1.3	1.4	1.2	1	1.2	1.3	1.3	1.2	1.4	0.8	Flatness dB: ±1.4 dB





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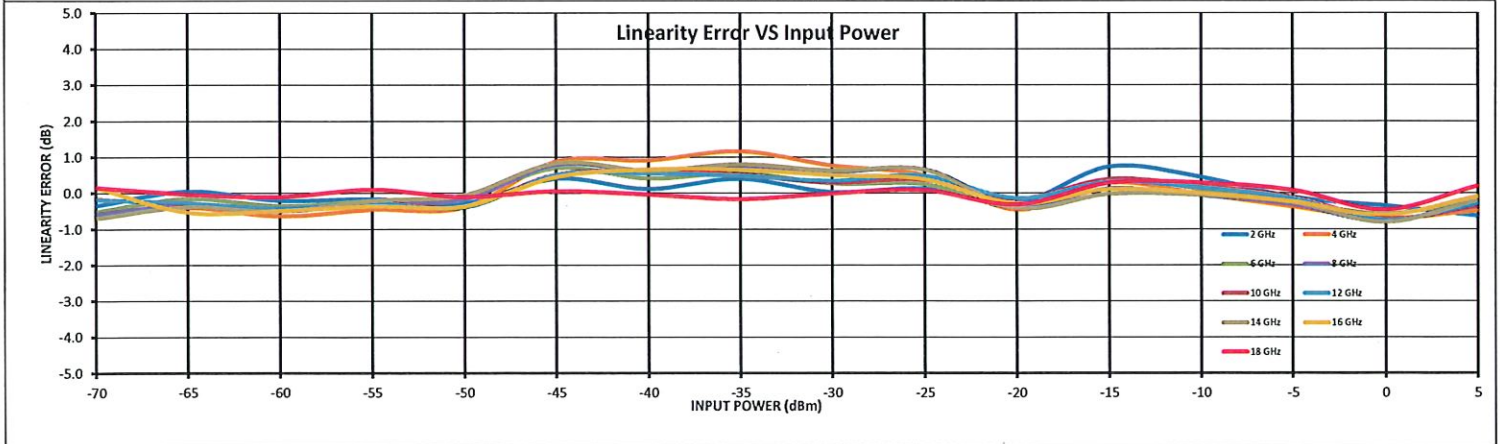
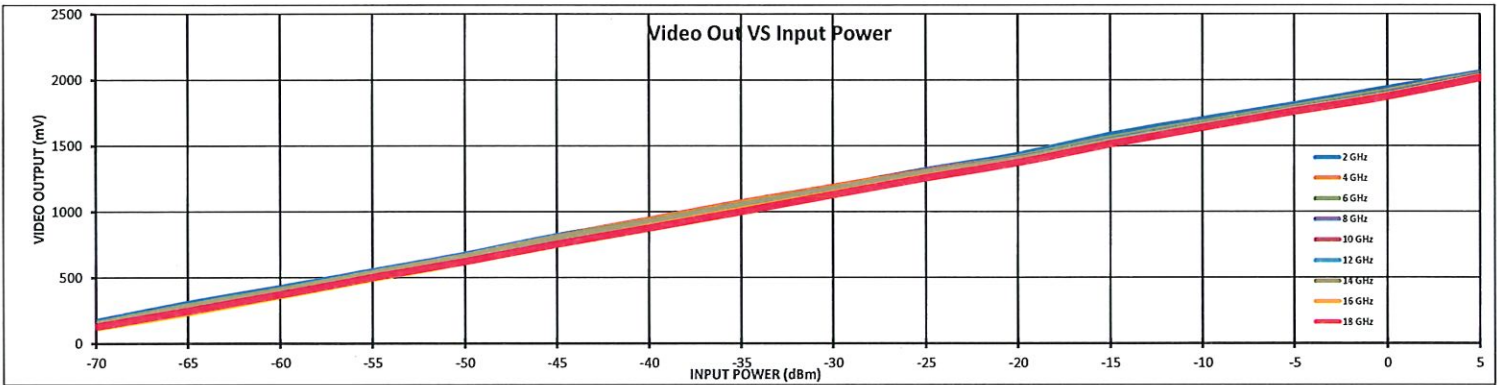
PL38728/2248

Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL38728/2248
 Date: 12/14/2022
 Tested By: RCombs
 Test Temp: +85°C

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1946																Measured Value (mV)
	SLOPE (mV/dB)	25.3																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1934																Measured Value (mV)
	SLOPE (mV/dB)	25.4																Error (mV)
	LIN. ERR. (dB)	1.2																LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1926																Measured Value (mV)
	SLOPE (mV/dB)	25.1																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1916																Measured Value (mV)
	SLOPE (mV/dB)	25.1																Error (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1906																Measured Value (mV)
	SLOPE (mV/dB)	25.3																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1903																Measured Value (mV)
	SLOPE (mV/dB)	25.2																Error (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1902																Measured Value (mV)
	SLOPE (mV/dB)	24.8																Error (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1904																Measured Value (mV)
	SLOPE (mV/dB)	25.7																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1883																Measured Value (mV)
	SLOPE (mV/dB)	25.2																Error (mV)
	LIN. ERR. (dB)	0.5																LINEARITY ERROR (dB)
Avg. Slope: 25.2 mV/dB		1.1	1.6	1.5	1.4	1.3	1.3	1.3	1.5	1.3	1.2	1.2	1.4	1.3	1.1	1.3	0.8	Flatness dB: ±1.6 dB





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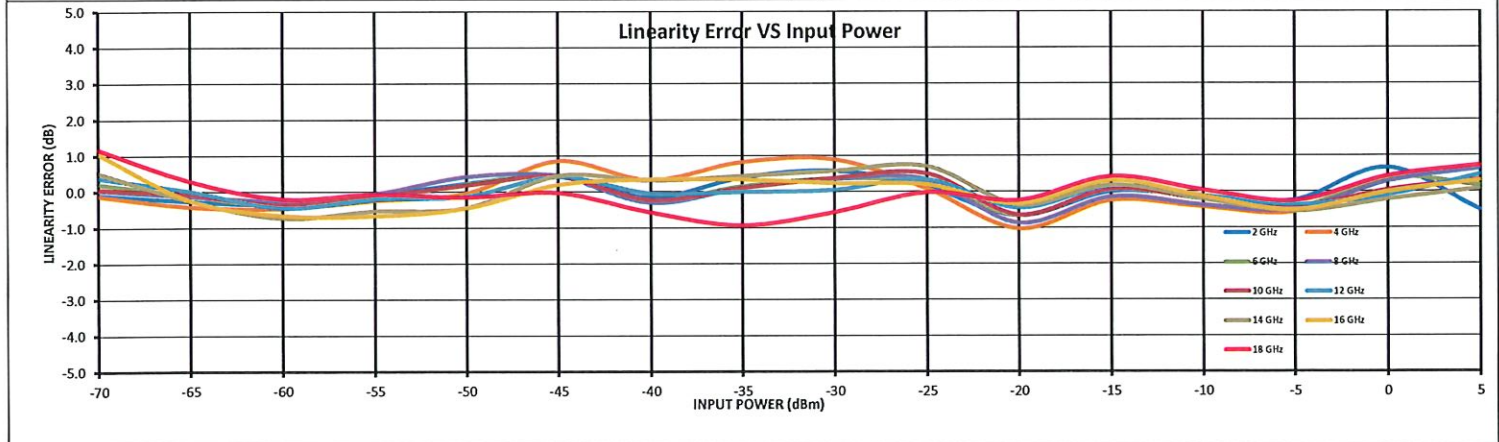
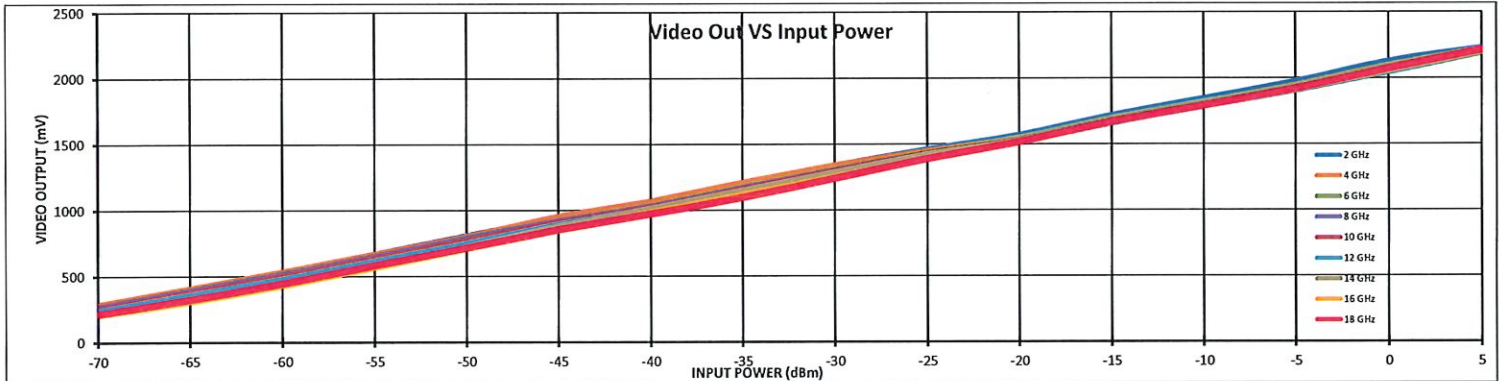
PL38728/2248

Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL38728/2248
 Date: 12/14/2022
 Tested By: RCombs
 Test Temp: -40°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)
2 GHz	2114	26.2	0.7	278	404	533	671	810	947	1062	1207	1343	1462	1572	1721	1848	1976	2131	2231				
				-2	-7	-9	-2	6	12	-4	10	15	4	-17	0	-4	-6	17	-13				
				-0.09	-0.25	-0.34	-0.09	0.23	0.47	-0.16	0.40	0.59	0.14	-0.67	0.00	-0.14	-0.24	0.66	-0.51				
4 GHz	2090	25.7	1.0	289	409	537	671	804	956	1070	1212	1342	1450	1549	1698	1822	1947	2100	2222				
				-3	-11	-12	-6	-1	22	8	21	23	2	-27	-6	-11	-14	10	4				
				-0.11	-0.41	-0.46	-0.24	-0.04	0.85	0.33	0.83	0.90	0.09	-1.03	-0.24	-0.43	-0.56	0.39	0.16				
6 GHz	2083	26.0	0.7	268	390	512	647	788	925	1036	1177	1312	1439	1546	1695	1817	1941	2093	2218				
				6	-2	-11	-5	6	12	-6	4	9	6	-17	2	-6	-12	10	5				
				0.22	-0.09	-0.41	-0.21	0.21	0.46	-0.24	0.16	0.37	0.24	-0.66	0.06	-0.22	-0.46	0.39	0.18				
8 GHz	2066	25.6	0.9	273	397	522	655	795	924	1033	1172	1306	1434	1531	1678	1800	1925	2073	2210				
				1	-3	-6	-2	11	11	-8	3	9	9	-22	-4	-10	-13	7	16				
				0.05	-0.12	-0.25	-0.06	0.42	0.44	-0.30	0.11	0.35	0.34	-0.87	-0.14	-0.38	-0.50	0.28	0.64				
10 GHz	2062	25.8	0.6	258	384	505	640	777	913	1025	1162	1298	1430	1530	1677	1799	1922	2063	2199				
				2	-2	-9	-3	5	11	-6	3	10	13	-17	2	-5	-11	1	8				
				0.06	-0.08	-0.36	-0.12	0.18	0.43	-0.23	0.10	0.38	0.50	-0.65	0.06	-0.21	-0.43	0.04	0.32				
12 GHz	2052	26.1	0.5	236	357	475	612	745	889	1008	1139	1271	1409	1519	1665	1788	1912	2050	2195				
				10	0	-12	-5	-3	11	-1	0	1	9	-12	4	-3	-10	-3	12				
				0.39	0.02	-0.44	-0.20	-0.12	0.42	-0.04	0.00	0.05	0.34	-0.45	0.16	-0.12	-0.37	-0.11	0.48				
14 GHz	2064	26.6	0.7	216	328	448	587	722	879	1008	1144	1281	1418	1522	1670	1792	1916	2058	2199				
				14	-6	-19	-14	-12	12	8	12	15	19	-10	5	-6	-15	-6	2				
				0.53	-0.24	-0.73	-0.63	-0.44	0.45	0.32	0.44	0.58	0.71	-0.36	0.18	-0.22	-0.55	-0.22	0.08				
16 GHz	2066	27.0	1.1	201	301	425	560	701	854	993	1129	1261	1395	1516	1668	1792	1917	2065	2209				
				29	-6	-18	-18	-12	5	9	9	6	5	-9	8	-4	-14	0	8				
				1.06	-0.23	-0.66	-0.67	-0.45	0.20	0.35	0.34	0.23	0.20	-0.33	0.31	-0.13	-0.51	-0.02	0.31				
18 GHz	2060	26.8	1.181	214	324	445	583	715	852	972	1096	1240	1389	1517	1669	1793	1919	2071	2214				
				32	8	-5	-2	-4	-1	-15	-25	-15	0	-7	11	1	-7	11	19				
				1.18	0.30	-0.20	-0.07	-0.16	-0.03	-0.58	-0.94	-0.57	-0.02	-0.25	0.41	0.03	-0.26	0.42	0.73				
Avg. Slope: 26.2 mV/dB				1.7	2.1	2.1	2.1	2.1	2	1.9	2.2	2	1.4	1.1	1.1	1.1	1.2	1.6	0.7	Flatness dB: ±2.2 dB			

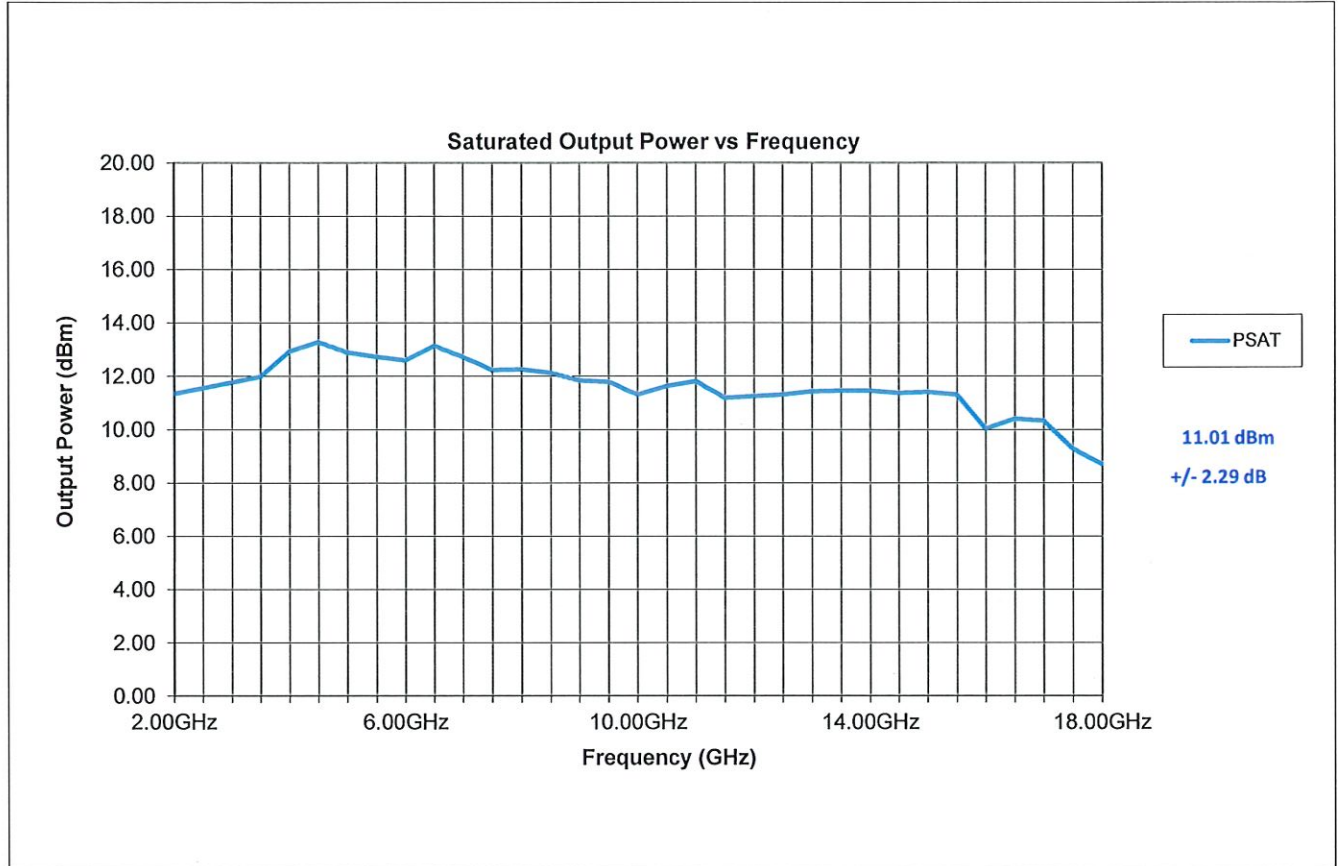




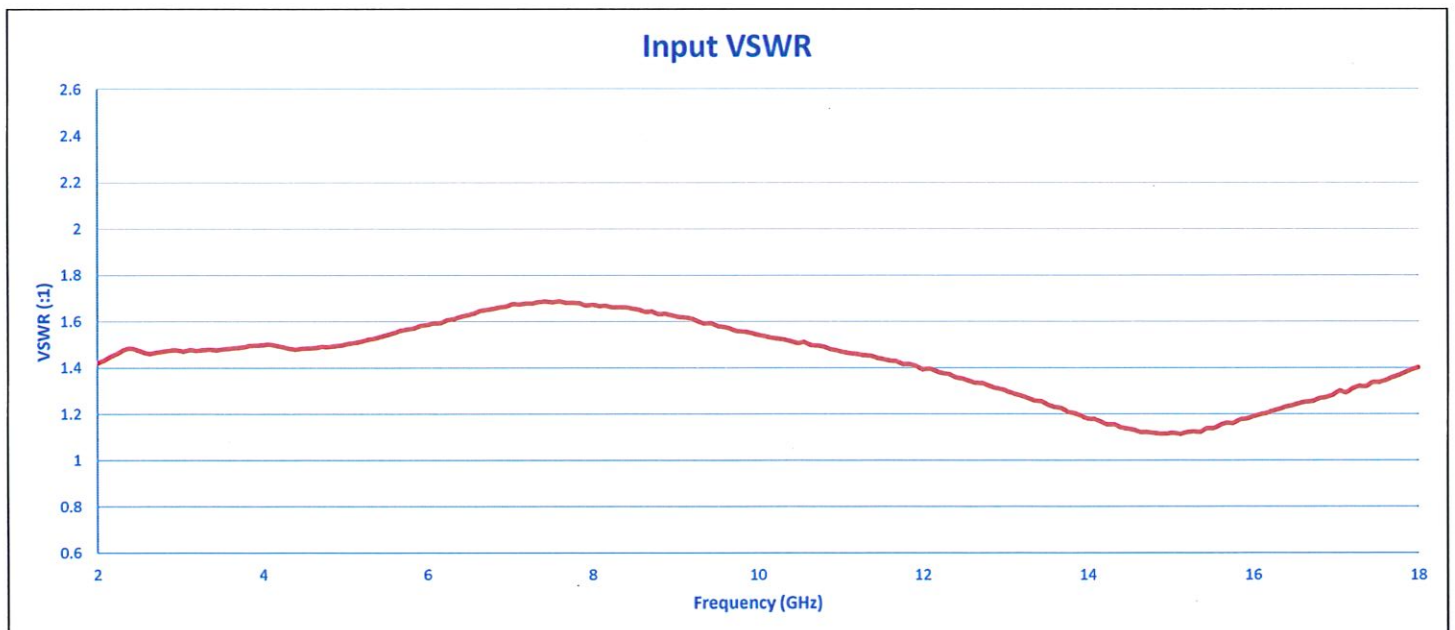
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PL38728/2248

PSAT



INPUT VSWR

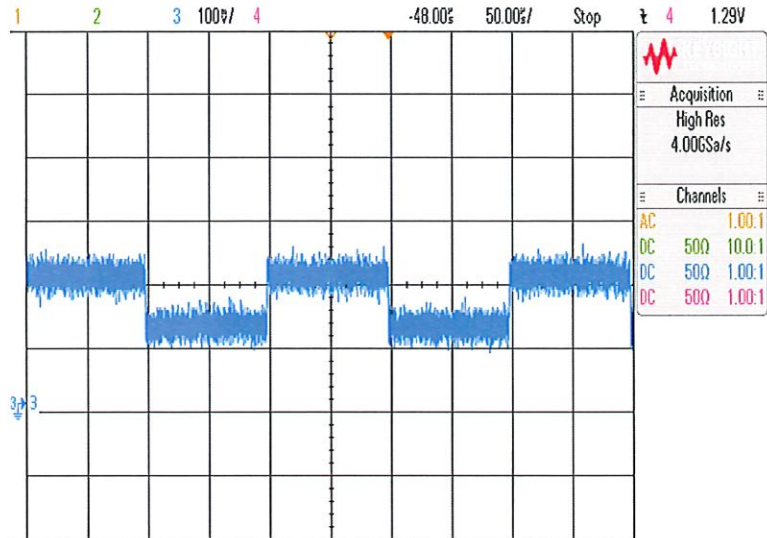




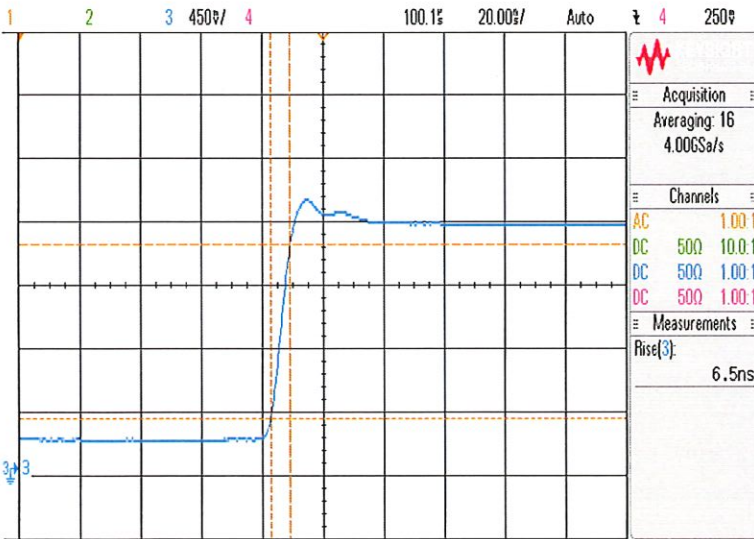
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TSS



Rise Time



Fall Time

