

# HIGH DOSE RADIATION TEST REPORT ADH8412S-CSH

*September 2025*  
Generic



Radiation Test Report	
Product:	ADH8412S-CSH
Gamma:	0,100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	150 Rad/s
Facilities:	VPT RAD
Tested:	August 27, 2025

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	RBIAS Supply Current (A)		Amplifier Drain Supply Current (A)		Total Supply Current (A)			
	SN	PRE	100k	PRE	100k	PRE	100k	
100k Biased	CTRL	24	1.901E-03	1.926E-03	5.286E-02	5.362E-02	5.476E-02	5.554E-02
	1	1.919E-03	1.930E-03	5.252E-02	5.273E-02	5.444E-02	5.466E-02	
	2	1.905E-03	1.929E-03	5.281E-02	5.500E-02	5.472E-02	5.693E-02	
	3	1.911E-03	1.919E-03	5.354E-02	5.387E-02	5.545E-02	5.578E-02	
	4	1.905E-03	1.916E-03	5.518E-02	5.558E-02	5.708E-02	5.749E-02	
	5	1.921E-03	1.936E-03	5.281E-02	5.319E-02	5.473E-02	5.512E-02	
	6	1.913E-03	1.926E-03	5.237E-02	5.278E-02	5.429E-02	5.471E-02	
	7	1.909E-03	1.928E-03	5.123E-02	5.160E-02	5.314E-02	5.353E-02	
	8	1.909E-03	1.925E-03	5.259E-02	5.302E-02	5.450E-02	5.495E-02	
	9	1.905E-03	1.920E-03	5.217E-02	5.259E-02	5.408E-02	5.451E-02	
	10	1.912E-03	1.927E-03	5.262E-02	5.287E-02	5.453E-02	5.480E-02	
	11	1.906E-03	1.915E-03	5.168E-02	5.197E-02	5.358E-02	5.388E-02	
	12	1.915E-03	1.927E-03	5.379E-02	5.415E-02	5.570E-02	5.608E-02	
	13	1.900E-03	1.914E-03	5.353E-02	5.395E-02	5.543E-02	5.586E-02	
	14	1.902E-03	1.918E-03	5.267E-02	5.301E-02	5.457E-02	5.493E-02	
	15	1.906E-03	1.921E-03	5.130E-02	5.163E-02	5.320E-02	5.355E-02	
	16	1.922E-03	1.935E-03	5.173E-02	5.213E-02	5.365E-02	5.406E-02	
	17	1.923E-03	1.935E-03	5.252E-02	5.321E-02	5.444E-02	5.514E-02	
	18	1.907E-03	1.924E-03	5.344E-02	5.385E-02	5.535E-02	5.578E-02	
	19	1.915E-03	1.931E-03	5.246E-02	5.284E-02	5.437E-02	5.477E-02	
	20	1.911E-03	1.929E-03	5.191E-02	5.240E-02	5.382E-02	5.433E-02	
	21	1.890E-03	1.907E-03	5.393E-02	5.434E-02	5.582E-02	5.625E-02	
	22	1.916E-03	1.926E-03	5.073E-02	5.092E-02	5.265E-02	5.285E-02	
	Min	1.890E-03	1.907E-03	5.073E-02	5.092E-02	5.265E-02	5.285E-02	
Max	1.923E-03	1.936E-03	5.518E-02	5.558E-02	5.708E-02	5.749E-02		
Mean	1.910E-03	1.925E-03	5.261E-02	5.307E-02	5.452E-02	5.500E-02		
Std. Dev	7.973E-06	7.456E-06	1.019E-03	1.129E-03	1.016E-03	1.127E-03		
Mean - 3 Sigma	1.886E-03	1.902E-03	4.956E-02	4.969E-02	5.148E-02	5.162E-02		
Mean + 3 Sigma	1.934E-03	1.947E-03	5.567E-02	5.646E-02	5.757E-02	5.838E-02		

	1GHz Small Signal Gain (dB)		3GHz Small Signal Gain (dB)		6GHz Small Signal Gain (dB)			
	SN	PRE	100k	PRE	100k	PRE	100k	
100k Biased	CTRL	24	15.744	15.732	14.789	14.846	14.79	14.84
	1	15.761	15.701	14.839	14.808	14.756	14.730	
	2	15.766	15.710	14.841	14.811	14.804	14.785	
	3	15.803	15.738	14.859	14.834	14.760	14.722	
	4	15.808	15.755	14.876	14.871	14.829	14.810	
	5	15.780	15.756	14.851	14.889	14.847	14.876	
	6	15.783	15.744	14.851	14.865	14.773	14.782	
	7	15.697	15.679	14.756	14.799	14.662	14.701	
	8	15.760	15.728	14.815	14.839	14.739	14.763	
	9	15.723	15.670	14.769	14.767	14.618	14.611	
	10	15.741	15.688	14.818	14.811	14.786	14.781	
	11	15.771	15.698	14.839	14.811	14.787	14.747	
	12	15.812	15.767	14.870	14.886	14.834	14.835	
	13	15.756	15.707	14.806	14.815	14.729	14.728	
	14	15.769	15.738	14.802	14.840	14.679	14.701	
	15	15.718	15.690	14.759	14.801	14.665	14.700	
	16	15.798	15.749	14.847	14.842	14.795	14.792	
	17	15.786	15.748	14.846	14.857	14.808	14.819	
	18	15.801	15.777	14.851	14.893	14.799	14.848	
	19	15.763	15.726	14.803	14.829	14.751	14.779	
	20	15.752	15.741	14.796	14.868	14.780	14.835	
	21	15.757	15.732	14.791	14.828	14.653	14.705	
	22	15.736	15.611	14.792	14.696	14.733	14.632	
	Min	15.697	15.611	14.756	14.696	14.6182	14.6114	
Max	15.812	15.777	14.876	14.893	14.8471	14.8760		
Mean	15.766	15.721	14.822	14.830	14.7539	14.7583		
Std. Dev	0.0302	0.0382	0.0351	0.0445	0.0637	0.0679		
Mean - 3 Sigma	15.675	15.606	14.716	14.697	14.5628	14.5546		
Mean + 3 Sigma	15.856	15.835	14.927	14.964	14.9450	14.9621		

	10GHz Small Signal Gain (dB)		1GHz OP1dB (dBm)		3GHz OP1dB (dBm)			
	SN	PRE	100k	PRE	100k	PRE	100k	
100k Biased	CTRL	24	13.985	14.120	18.005	18.066	18.487	18.498
	1	14.086	13.961	17.968	17.925	18.389	18.371	
	2	14.175	14.122	18.036	18.016	18.462	18.458	
	3	14.164	14.095	18.164	18.149	18.590	18.584	
	4	14.218	14.172	18.434	18.423	18.791	18.789	
	5	14.021	14.076	18.017	18.050	18.460	18.461	
	6	14.085	14.098	17.964	17.965	18.407	18.400	
	7	13.911	14.002	17.666	17.699	18.217	18.215	
	8	14.058	14.108	17.998	18.020	18.454	18.451	
	9	13.855	13.852	17.879	17.901	18.389	18.398	
	10	14.085	14.088	17.979	17.988	18.424	18.409	
	11	14.177	14.077	17.783	17.784	18.261	18.271	
	12	14.136	14.123	18.167	18.197	18.590	18.597	
	13	14.155	14.157	18.174	18.197	18.608	18.608	
	14	13.949	13.996	17.982	18.016	18.472	18.461	
	15	13.962	13.999	17.718	17.752	18.259	18.251	
	16	13.761	13.770	17.783	17.784	18.309	18.306	
	17	13.900	13.930	17.997	18.001	18.437	18.432	
	18	13.905	13.965	18.120	18.159	18.560	18.566	
	19	13.831	13.880	17.927	17.966	18.432	18.443	
	20	13.943	14.055	17.809	17.857	18.328	18.324	
	21	13.916	13.989	18.163	18.218	18.657	18.669	
	22	13.984	13.845	17.609	17.606	18.147	18.161	
	Min	13.761	13.770	17.61	17.61	18.1471	18.1606	
Max	14.218	14.172	18.43	18.42	18.7908	18.7890		
Mean	14.013	14.016	17.97	17.99	18.4383	18.4375		
Std. Dev	0.1289	0.1096	0.1944	0.1939	0.1538	0.1540		
Mean - 3 Sigma	13.626	13.687	17.39	17.40	17.9768	17.9754		
Mean + 3 Sigma	14.400	14.345	18.55	18.57	18.8997	18.8995		

	SN	6GHz OP1dB (dBm)		10GHz OP1dB (dBm)	
		PRE	100k	PRE	100k
<b>CTRL</b>	<b>24</b>	<b>19.191</b>	<b>19.262</b>	<b>14.132</b>	<b>14.277</b>
100k Biased	1	19.212	19.118	13.978	13.825
	2	19.273	19.226	14.290	14.219
	3	19.335	19.315	14.192	14.179
	4	19.439	19.428	14.426	14.432
	5	19.128	19.144	14.122	14.169
	6	19.222	19.202	13.805	13.795
	7	19.006	19.022	13.574	13.652
	8	19.221	19.218	14.008	14.013
	9	19.162	19.161	13.774	13.768
	10	19.194	19.170	14.066	14.096
	11	19.168	19.142	14.061	14.034
	12	19.288	19.296	14.148	14.160
	13	19.360	19.357	14.261	14.294
	14	19.247	19.272	13.838	13.936
	15	19.081	19.084	13.697	13.736
	16	19.013	18.991	13.715	13.694
	17	19.121	19.118	13.836	13.842
	18	19.230	19.239	14.055	14.046
	19	19.061	19.081	13.810	13.843
	20	19.043	19.098	13.882	14.033
	21	19.349	19.368	14.115	14.105
	22	19.011	18.975	13.651	13.605
Min	19.0056	18.9751	13.5736	13.6051	
Max	19.4386	19.4282	14.4257	14.4318	
Mean	19.1893	19.1831	13.9683	13.9762	
Std. Dev	0.1231	0.1225	0.2267	0.2226	
Mean - 3 Sigma	18.8199	18.8157	13.2882	13.3085	
Mean + 3 Sigma	19.5587	19.5505	14.6484	14.6438	



