

HIGH DOSE RADIATION TEST REPORT ADH8412S

January 2024
Generic



Radiation Test Report	
Product:	ADH8412S
Gamma:	0,30k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	80 Rad/s
Facilities:	VPT RAD
Tested:	January 17, 2024

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It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

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	SN	1GHz Small Signal Gain (dB)		3GHz Small Signal Gain (dB)		6GHz Small Signal Gain (dB)	
		PRE	30k	PRE	30k	PRE	30k
CTRL	36	15.400	15.402	14.600	14.602	14.600	14.717
	1	15.500	15.420	14.600	14.619	14.700	14.767
	2	15.400	15.380	14.600	14.601	14.600	14.721
	3	15.500	15.265	14.600	14.512	14.600	14.636
	4	15.400	15.396	14.600	14.629	14.600	14.733
	5	15.500	15.427	14.600	14.620	14.700	14.765
	6	15.500	15.441	14.700	14.644	14.700	14.802
	7	15.400	15.396	14.600	14.580	14.600	14.709
	8	15.500	15.419	14.600	14.622	14.600	14.752
	9	15.400	15.409	14.600	14.606	14.600	14.752
	10	15.400	15.399	14.600	14.590	14.600	14.721
	Min	15.4000	15.2650	14.6000	14.5116	14.6000	14.6364
	Max	15.5000	15.4410	14.7000	14.6442	14.7000	14.8018
	Mean	15.4500	15.3952	14.6100	14.6024	14.6300	14.7358
	Std. Dev	0.0527	0.0491	0.0316	0.0371	0.0483	0.0444
	Mean - 3 Sigma	15.2919	15.2478	14.5151	14.4910	14.4851	14.6026
	Mean + 3 Sigma	15.6081	15.5426	14.7049	14.7137	14.7749	14.8690

	SN	10GHz Small Signal Gain (dB)		1GHz OP1dB (dBm)		3GHz OP1dB (dBm)	
		PRE	30k	PRE	30k	PRE	30k
CTRL	36	14.100	14.186	18.000	18.363	17.900	18.429
	1	14.100	14.271	17.900	18.304	17.800	18.362
	2	14.100	14.203	17.900	18.292	17.900	18.332
	3	13.900	13.981	17.800	18.255	17.800	18.287
	4	14.000	14.181	17.800	18.178	17.800	18.216
	5	14.000	14.152	17.900	18.306	17.800	18.357
	6	13.900	14.060	18.000	18.422	17.900	18.419
	7	14.000	14.149	18.000	18.355	17.900	18.426
	8	13.900	14.074	18.000	18.359	17.900	18.390
	9	14.100	14.239	17.900	18.233	17.800	18.322
	10	14.100	14.170	17.900	18.285	17.900	18.370
	Min	13.9000	13.9815	17.8000	18.1783	17.8000	18.2158
	Max	14.1000	14.2713	18.0000	18.4222	17.9000	18.4263
	Mean	14.0100	14.1482	17.9100	18.2990	17.8500	18.3482
	Std. Dev	0.0876	0.0876	0.0738	0.0693	0.0527	0.0631
	Mean - 3 Sigma	13.7473	13.8854	17.6886	18.0912	17.6919	18.1590
	Mean + 3 Sigma	14.2727	14.4110	18.1314	18.5068	18.0081	18.5374

	SN	6GHz OP1dB (dBm)		10GHz OP1dB (dBm)		Total Supply Current (A)	
		PRE	30k	PRE	30k	PRE	30k
CTRL	36	17.600	18.691	11.800	13.366	5.71E-02	5.70E-02
	1	17.600	18.686	11.900	13.519	5.69E-02	5.66E-02
	2	17.600	18.681	11.800	13.373	5.62E-02	5.61E-02
	3	17.500	18.530	11.300	12.861	5.62E-02	5.61E-02
	4	17.500	18.552	11.500	13.088	5.55E-02	5.55E-02
	5	17.600	18.640	11.700	13.271	5.67E-02	5.67E-02
	6	17.500	18.576	11.400	12.978	5.79E-02	5.78E-02
	7	17.600	18.676	11.700	13.363	5.70E-02	5.69E-02
	8	17.600	18.589	11.500	13.056	5.73E-02	5.70E-02
	9	17.600	18.659	11.800	13.414	5.63E-02	5.62E-02
	10	17.600	18.670	11.700	13.329	5.64E-02	5.64E-02
	Min	17.5000	18.5303	11.3000	12.8613	5.550E-02	5.548E-02
	Max	17.6000	18.6857	11.9000	13.5188	5.790E-02	5.783E-02
	Mean	17.5700	18.6259	11.6300	13.2251	5.664E-02	5.653E-02
	Std. Dev	0.0483	0.0585	0.1947	0.2151	6.736E-04	6.373E-04
	Mean - 3 Sigma	17.4251	18.4503	11.0460	12.5797	5.462E-02	5.462E-02
	Mean + 3 Sigma	17.7149	18.8015	12.2140	13.8705	5.866E-02	5.844E-02



