

Operational Amplifiers

Wide Bandwidth

Type	Temperature Range	Pinout See This Section	Gain Bandwidth Product (MHz)	Full Power Bandwidth (MHz)	Slew Rate (V/ μ s)	Bias Current (nA)	Open Loop Gain (kV/V)	Minimum Gain Stable	Comments	
SINGLES	HA-2510	-55°C to +125°C	1, 2, 20	12	1.0	65	100	15	Unity	
	HA-2512	-55°C to +125°C	1, 2	12	1.0	60	125	15	Unity	
	HA-2515	0°C to +75°C	1, 2	12	1.0	60	125	15	Unity	
	HA-2520	-55°C to +125°C	1, 2, 20	20	2.0	120	100	15	3	
	HA-2522	-55°C to +125°C	1, 2	20	1.6	120	125	15	3	
	HA-2525	0°C to +75°C	1, 2	20	1.6	-120	125	15	3	
	HA-2529	-55°C to +125°C	1, 2, 20	20	2.6	150	50	18	3	New
	HA-2539	-55°C to +125°C -25°C to +85°C 0°C to +75°C	3, 21	600	9.5	600	5000	30	10	
	HA-2540	-55°C to +125°C -25°C to +85°C 0°C to +75°C	4, 13	400	6.0	400	5000	30	10	
	HA-2541	-55°C to +125°C 0°C to +75°C	5, 6	40	4.5	280	6000	16	Unity	New, Fast Settling
	HA-2542	-55°C to +125°C 0°C to +75°C	7, 32	70	5.5	375	6000	30	2	New, High Output Current
	HA-2544	-55°C to +125°C 0°C to +75°C	14, 15, 20	50	4.2	150	8000	6	Unity	New, Video
	HA-2548	-55°C to +125°C -40°C to +85°C 0°C to +75°C	2, 8	150	1.91	120	5	3162	5	New
	HA-2620	-55°C to +125°C	2, 20, 27	100	0.6	35	1	150	5	
	HA-2622	-55°C to +125°C	2, 27	100	0.6	35	5	150	5	
	HA-2625	0°C to +75°C	2, 27	100	0.6	35	5	150	5	
	HA-5137	-55°C to +125°C 0°C to +75°C	25, 26, 27	63	0.3	17	8	1800	5	New, Precision
	HA-5160	-55°C to +125°C 0°C to +75°C	19	100	1.0	120	0.02	150	10	J-FET
	HA-5162	-55°C to +125°C 0°C to +75°C	19	100	1.0	70	0.02	100	10	J-FET
	HA-5190	-55°C to +125°C	4, 13, 18	150	6.5	200	5000	30	5	Fast Settling
HA-5195	0°C to +75°C	4, 18	150	6.5	200	5000	30	5	Fast Settling	
HA-5221	-55°C to +125°C -40°C to +85°C 0°C to +75°C	25, 26	100	0.40	25	40	2512	1		
HFA-0001	-55°C to +125°C -40°C to +85°C 0°C to +75°C	33, 34	350	53	1000	15000	200	1	New	
HFA-0002	-55°C to +125°C -40°C to +85°C 0°C to +75°C	35, 36	1000	11.4	250	230	105	10	New	
HFA-0005	-55°C to +125°C -40°C to +85°C 0°C to +75°C	33, 37	300	22	420	15000	230	1	New	
DUALS	HA-5102	-55°C to +125°C 0°C to +75°C	11, 12, 30	8	0.05	3	130	230	Unity	Low Noise
	HA-5222	-55°C to +125°C -40°C to +85°C 0°C to +75°C	23, 24	100	0.4	25	40	2512	1	New
QUADS	HA-2400	-55°C to +125°C	29, 31	40	0.5	30	50	150	10	Addressable
	HA-2404	-25°C to +85°C	29	40	0.5	30	50	150	10	Addressable
	HA-2405	0°C to +75°C	29	40	0.5	30	50	150	10	Addressable
	HA-2406	0°C to +75°C	29	30	0.3	20	50	150	10	Addressable
	HA-5104	-55°C to +125°C 0°C to +75°C	23, 24	8	0.05	3	130	230	Unity	Low Noise