



ICs

Amplifiers & Linear

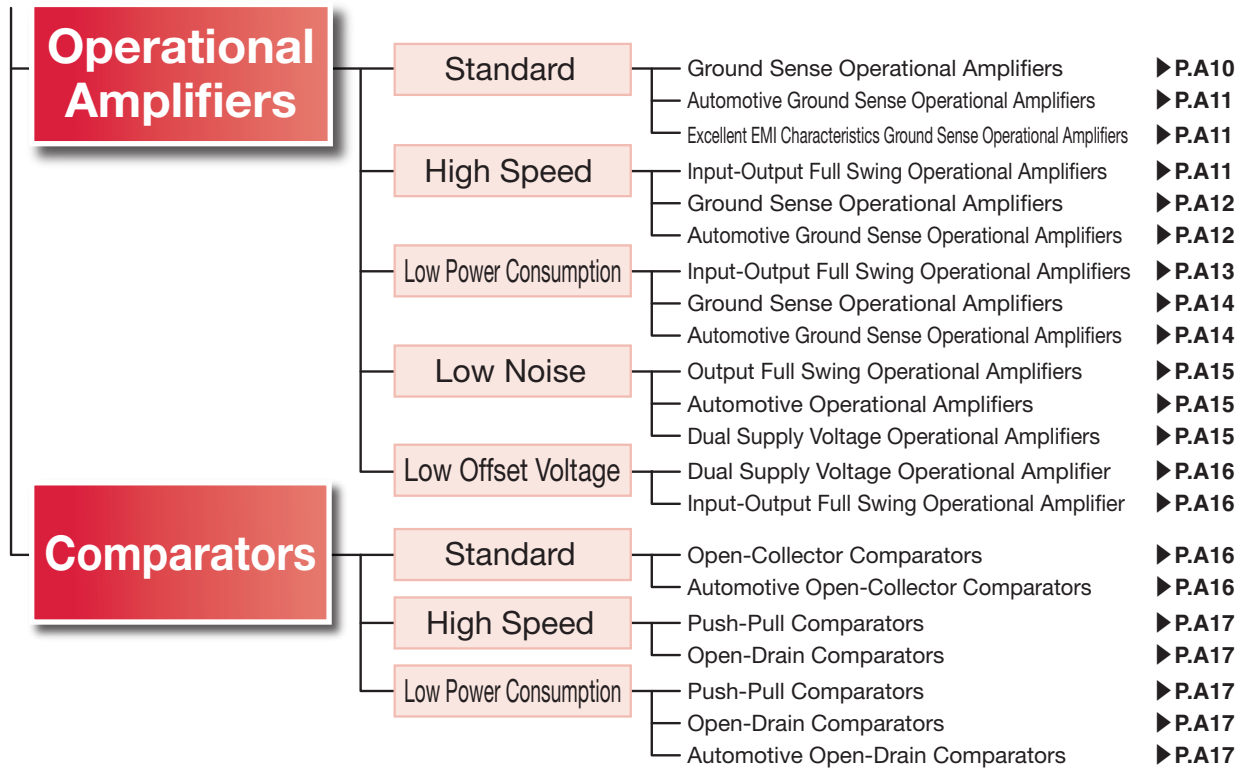
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General-purpose ICs

Operational Amplifiers/ Comparators

Operational Amplifiers/Comparators



Operational Amplifiers

Standard

Ground Sense Operational Amplifiers																
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package
BA2904F	○															SOP8
BA2904FV	○	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B8
BA2904FVM	○															MSOP8
BA2904SF	○															SOP8
BA2904SFV	○	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +105	SSOP-B8
BA2904SFVM	○															MSOP8
BA2904YF-LB	○	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP8
BA2902F	○															SOP14
BA2902FV	○	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B14
BA2902SF	○															SOP14
BA2902SFV	○	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +105	SSOP-B14
BA2902YF-LB	○	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP14
BA3404F	—															SOP8
BA3404FJ	—	2	4 to 36	2.0	2.0	70	30	V _{EE} to V _{CC} -2.0	V _{EE} to V _{CC} -2.0	100	90	94	1.2	1.2	-40 to +85	SOP-J8
BA3404FVM	—															MSOP8
New LM2902F	○															SOP14
New LM2902FJ	○															SOP-J14
New LM2902FV	○	4	3 to 32	1,000	1.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.3	0.8	-40 to +125	SSOP-B14
New LM2902FVJ	○															TSSOP-B14J
LM2904F	○															SOP8
LM2904FJ	○															SOP-J8
LM2904FV	○	2	3 to 32	600	1.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.3	0.8	-40 to +125	SSOP-B8
LM2904FVJ	○															TSSOP-B8J
New LM2904FVM	○															MSOP8
LM2904FVT	○															TSSOP-B8

Product Grade : —Standard ○High Grade

Automotive Ground Sense Operational Amplifiers																	
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package	Automotive Grade AEC-Q100
BA2904YF-C	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP8	YES
BA2904YFV-C	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B8	YES
BA2904YFVM-C	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	MSOP8	YES
BA2902YF-C	●	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP14	YES
BA2902YFV-C	●	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B14	YES
BA2904YF-M	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP8	YES
BA2904YFV-M	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B8	YES
BA2904YFVM-M	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	MSOP8	YES
BA2902YF-M	●	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP14	YES
BA2902YFV-M	●	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B14	YES

Excellent EMI Characteristics Ground Sense Operational Amplifiers																	
New BA82904YF-C	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP8	YES
New BA82904YFVM-C	●	2	3 to 36	0.5	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	MSOP8	YES
New BA82902YF-C	●	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SOP14	YES
New BA82902YFV-C	●	4	3 to 36	0.7	2.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE} to V _{CC} -1.5	100	80	100	0.2	0.5	-40 to +125	SSOP-B14	YES

Product Grade : ●··Automotive Grade

High Speed

Input-Output Full Swing Operational Amplifiers																	
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package	
BU7261G	—	1	1.8 to 5.5	250	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +85	SSOP5	
BU7261SG	○	1	1.8 to 5.5	250	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +105	SSOP5	
BU7262F	—	2	1.8 to 5.5	550	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +85	SOP8	
BU7262FVM	—	2	1.8 to 5.5	550	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +85	MSOP8	
BU7262NUX	—	2	1.8 to 5.5	550	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +85	VSON008X2030	
BU7262SF	○	2	1.8 to 5.5	550	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +105	SOP8	
BU7262SFVM	○	2	1.8 to 5.5	550	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +105	MSOP8	
BU7262SNUX	○	2	1.8 to 5.5	550	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +105	VSON008X2030	
BU7264F	—	4	1.8 to 5.5	1,100	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +85	SOP14	
BU7264FV	—	4	1.8 to 5.5	1,100	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +85	SSOP-B14	
BU7264SF	○	4	1.8 to 5.5	1,100	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +105	SOP14	
BU7264SFV	○	4	1.8 to 5.5	1,100	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.1	2.0	-40 to +105	SSOP-B14	
BU7291G	—	1	2.4 to 5.5	470	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.0	2.8	-40 to +85	SSOP5	
BU7291SG	○	1	2.4 to 5.5	470	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.0	2.8	-40 to +105	SSOP5	
BU7294F	—	4	2.4 to 5.5	2,000	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.0	2.8	-40 to +85	SOP14	
BU7294FV	—	4	2.4 to 5.5	2,000	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.0	2.8	-40 to +85	SSOP-B14	
BU7294SF	○	4	2.4 to 5.5	2,000	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.0	2.8	-40 to +105	SOP14	
BU7294SFV	○	4	2.4 to 5.5	2,000	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.0	2.8	-40 to +105	SSOP-B14	
BU7295HFV	—	1	1.8 to 5.5	150	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.0	1.0	-40 to +85	HVSO5	
BU7295SHFV	○	1	1.8 to 5.5	150	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.0	1.0	-40 to +105	HVSO5	
BU7255HFV	—	1	2.4 to 5.5	540	1.0	0.001	4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.4	4.0	-40 to +85	HVSO5	
BU7255SHFV	○	1	2.4 to 5.5	540	1.0	0.001	4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.4	4.0	-40 to +105	HVSO5	
BD7561G	—	1	5.0 to 14.5	440	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.9	1.0	-40 to +85	SSOP5	
BD7561SG	○	1	5.0 to 14.5	440	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.9	1.0	-40 to +105	SSOP5	
BD7562F	—	2	5.0 to 14.5	900	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.9	1.0	-40 to +85	SOP8	
BD7562FVM	—	2	5.0 to 14.5	900	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.9	1.0	-40 to +85	MSOP8	
BD7562SF	○	2	5.0 to 14.5	900	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.9	1.0	-40 to +105	SOP8	
BD7562SFVM	○	2	5.0 to 14.5	900	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.9	1.0	-40 to +105	MSOP8	

Product Grade : —··Standard ○··High Grade

High Speed
A Amplifiers & Linear

Ground Sense Operational Amplifiers																	
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package	
BA3472F	—	2	3 to 36	4.0	1.0	100	30	V _{EE} to V _{CC} -2.0	V _{EE} +0.3 to V _{CC} -1.0	100	97	97	10.0	4.0	-40 to +85	SOP8	
BA3472FV	—															SSOP-B8	
BA3472FJ	—															SOP-J8	
BA3472FVM	—															MSOP8	
BA3472FVT	—															TSSOP-B8	
BA3472YF-LB	○															-40 to +125	SOP8
BA3472RFVM	○	-40 to +105	MSOP8														
BA3474F	—	4	3 to 36	8.0	1.0	100	30	V _{EE} to V _{CC} -2.0	V _{EE} +0.3 to V _{CC} -1.0	100	97	97	10.0	4.0	-40 to +75	SOP14	
BA3474FV	—															SSOP-B14	
BA3474FVJ	—															TSSOP-B14J	
BA3474RFV	○															-40 to +105	SSOP-B14
BU7461G	—	1	1.7 to 5.5	0.15	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.0	1.0	-40 to +85	SSOP5	
BU7461SG	○															-40 to +105	SSOP5
BU7462F	—	2	1.7 to 5.5	0.3	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.0	1.0	-40 to +85	SOP8	
BU7462FVM	—															MSOP8	
BU7462NUX	—															VSON008X2030	
BU7462SF	○	2	1.7 to 5.5	0.3	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.0	1.0	-40 to +105	SOP8	
BU7462SFVM	○															MSOP8	
BU7462SNUX	○															VSON008X2030	
BU7464F	—	4	1.7 to 5.5	0.6	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	1.0	1.0	-40 to +85	SOP14	
BU7464SF	○															-40 to +105	SOP14
BU7465HFV	—	1	1.7 to 5.5	0.12	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	1.0	1.2	-40 to +85	HVSOF5	
BU7465SHFV	○															-40 to +105	HVSOF5
BU7481G	—	1	1.8 to 5.5	0.42	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	3.2	2.8	-40 to +85	SSOP5	
BU7481SG	○															-40 to +105	SSOP5
BU7485G	—	1	3.0 to 5.5	1.5	1.0	0.001	8	V _{SS} to V _{DD} -1.4	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	10.0	10.0	-40 to +85	SSOP5	
BU7485SG	○															-40 to +105	SSOP5
BU7486F	—	2	3.0 to 5.5	3.0	1.0	0.001	8	V _{SS} to V _{DD} -1.4	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	10.0	10.0	-40 to +85	SOP8	
BU7486FV	—															SSOP-B8	
BU7486FVM	—															MSOP8	
BU7486SF	○															SOP8	
BU7486SFV	○															-40 to +105	SSOP-B8
BU7486SFVM	○															MSOP8	
BU7487F	—	4	3.0 to 5.5	6.0	1.0	0.001	8	V _{SS} to V _{DD} -1.4	V _{SS} +0.1 to V _{DD} -0.1	105	60	80	10.0	10.0	-40 to +85	SOP14	
BU7487FV	—															SSOP-B14	
BU7487SF	○															-40 to +105	SOP14
BU7487SFV	○															SSOP-B14	
BU7495HFV	—	1	1.8 to 5.5	0.65	1.0	0.001	7	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	5.0	4.0	-40 to +85	HVSOF5	
BU7495SHFV	○															-40 to +105	HVSOF5

Automotive Ground Sense Operational Amplifiers

Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package	Automotive Grade AEC-Q100
BA3472YF-C	●	2	3 to 36	4.0	1.0	100	30	V _{EE} to V _{CC} -2.0	V _{EE} +0.3 to V _{CC} -1.0	100	97	97	10	4.0	-40 to +125	SOP8	YES
BA3472YFV-C	●															SSOP-B8	YES
BA3472YFVM-C	●															MSOP8	YES
BA3472WFV-C	●															SSOP-B8	YES
BA3474WFV-C	●	4	3 to 36	8.0	1.0	100	30	V _{EE} to V _{CC} -2.0	V _{EE} +0.3 to V _{CC} -1.0	100	97	97	10	4.0	-40 to +125	SSOP-B14	YES
BA3474YFV-C	●															SSOP-B14	YES

Product Grade : — Standard ○ High Grade ● Automotive Grade

Low Power Consumption

Input-Output Full Swing Operational Amplifiers																
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package
BU7205HFV	—	1	1.8 to 5.5	0.4	1.0	0.001	1.2	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.0025	0.0025	-40 to +85	HVSOF5
BU7205SHFV	○														-40 to +105	HVSOF5
BU7241G	—	1	1.8 to 5.5	70	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.4	0.9	-40 to +85	SSOP5
BU7241SG	○														-40 to +105	SSOP5
BU7242F	—	2	1.8 to 5.5	180	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.4	0.9	-40 to +85	SOP8
BU7242FVM	—														MSOP8	
BU7242NUX	—														VSON008X2030	
BU7242SF	○	2	1.8 to 5.5	180	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.4	0.9	-40 to +105	SOP8
BU7242SFVM	○														MSOP8	
BU7242SNUX	○														VSON008X2030	
BU7244F	—	4	1.8 to 5.5	360	1.0	0.001	10	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.4	0.9	-40 to +85	SOP14
BU7244FV	—														SSOP-B14	
BU7244SF	○														-40 to +105	SOP14
BU7244SFV	○														SSOP-B14	
BU7245HFV	—	1	1.8 to 5.5	5	1.0	0.001	4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.035	0.09	-40 to +85	HVSOF5
BU7245SHFV	○														-40 to +105	HVSOF5
BU7265G	—	1	1.8 to 5.5	0.35	1.0	0.001	2.4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.0024	0.004	-40 to +85	SSOP5
BU7265SG	○														-40 to +105	SSOP5
BU7266F	—	2	1.8 to 5.5	0.7	1.0	0.001	2.4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.0024	0.004	-40 to +85	SOP8
BU7266FV	—														SSOP-B8	
BU7266FVM	—														MSOP8	
BU7266SF	○	2	1.8 to 5.5	0.7	1.0	0.001	2.4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.0024	0.004	-40 to +105	SOP8
BU7266SFV	○														SSOP-B8	
BU7266SFVM	○														MSOP8	
BU7271G	—	1	1.8 to 5.5	8.6	1.0	0.001	4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.05	0.09	-40 to +85	SSOP5
BU7271SG	○														-40 to +105	SSOP5
BU7275HFV	—	1	1.8 to 5.5	40	1.0	0.001	8	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	HVSOF5
BU7275SHFV	○														-40 to +105	HVSOF5
BD12730G	—	1	1.8 to 5.5	320	1.0	50	5	GND to V ₊	0.1 to V ₊ -0.1	85	70	85	0.4	1.0	-40 to +85	SSOP5
BD12732F	—	2	1.8 to 5.5	580	1.0	50	5	GND to V ₊	0.1 to V ₊ -0.1	85	70	85	0.4	1.0	-40 to +85	SOP8
BD12732FJ	—														SOP-J8	
BD12732FV	—														SSOP-B8	
BD12732FVJ	—														TSSOP-B8J	
BD12732FVM	—														MSOP8	
BD12732FVT	—														TSSOP-B8	
BD12734F	—	4	1.8 to 5.5	1,200	1.0	50	5	GND to V ₊	0.1 to V ₊ -0.1	85	70	85	0.4	1.0	-40 to +85	SOP14
BD12734FJ	—														SOP-J14	
BD12734FV	—														SSOP-B14	
BD12734FVJ	—														TSSOP-B14J	
BD7541G	—	1	5.0 to 14.5	180	1.0	0.001	4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	SSOP5
BD7541SG	○														-40 to +105	SSOP5
BD7542F	—	2	5.0 to 14.5	400	1.0	0.001	4	V _{SS} to V _{DD}	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	SOP8
BD7542FVM	—														MSOP8	
BD7542SF	○														-40 to +105	SOP8
BD7542SFVM	○														MSOP8	
LMR931G	—	1	1.8 to 5.0	80	1.0	5	28	V _{SS} to V _{DD}	V _{SS} +0.04 to V _{DD} -0.05	100	94	85	0.4	1.4	-40 to +85	SSOP5
LMR932F	—	2	1.8 to 5.0	135	1.0	5	28	V _{SS} to V _{DD}	V _{SS} +0.04 to V _{DD} -0.05	100	94	85	0.4	1.4	-40 to +85	SOP8
LMR932FJ	—														SOP-J8	
LMR932FV	—														SSOP-B8	
LMR932FVJ	—														TSSOP-B8J	
LMR932FVM	—														MSOP8	
LMR932FVT	—														TSSOP-B8	
LMR934F	—	4	1.8 to 5.0	250	1.0	5	28	V _{SS} to V _{DD}	V _{SS} +0.04 to V _{DD} -0.05	100	94	85	0.4	1.4	-40 to +85	SOP14
LMR934FJ	—														SOP-J14	
LMR934FV	—														SSOP-B14	
LMR934FVJ	—														TSSOP-B14J	
LMR981G	—	1	1.8 to 5.0	80	1.0	5	28	V _{SS} to V _{DD}	V _{SS} +0.04 to V _{DD} -0.05	100	94	85	0.4	1.4	-40 to +85	SSOP6
LMR982FVM	—	2	1.8 to 5.0	135	1.0	5	28	V _{SS} to V _{DD}	V _{SS} +0.04 to V _{DD} -0.05	100	94	85	0.4	1.4	-40 to +85	MSOP8

Product Grade : —Standard ○High Grade

Low Power Consumption
A Amplifiers & Linear

Ground Sense Operational Amplifiers																
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package
BU7411G	○	1	1.6 to 5.5	0.35	1.0	0.001	2.4	V _{SS} to V _{DD} -1.0	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.0024	0.004	-40 to +85	SSOP5
BU7411SG	○	1	1.6 to 5.5	0.35	1.0	0.001	2.4	V _{SS} to V _{DD} -1.0	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.0024	0.004	-40 to +105	SSOP5
BU7421G	○	1	1.7 to 5.5	8.5	1.0	0.001	4	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.05	0.09	-40 to +85	SSOP5
BU7421SG	○	1	1.7 to 5.5	8.5	1.0	0.001	4	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.05	0.09	-40 to +105	SSOP5
BU7441G	○	1	1.7 to 5.5	50	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	SSOP5
BU7441SG	○	1	1.7 to 5.5	50	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +105	SSOP5
BU7442F	○	2	1.7 to 5.5	100	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	SOP8
BU7442FVM	○	2	1.7 to 5.5	100	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	MSOP8
BU7442NUX	○	2	1.7 to 5.5	100	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	VSON008X2030
BU7442SF	○	2	1.7 to 5.5	100	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +105	SOP8
BU7442SFVM	○	2	1.7 to 5.5	100	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +105	MSOP8
BU7442SNUX	○	2	1.7 to 5.5	100	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +105	VSON008X2030
BU7444F	○	4	1.7 to 5.5	200	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +85	SOP14
BU7444SF	○	4	1.7 to 5.5	200	1.0	0.001	6	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	95	60	80	0.3	0.6	-40 to +105	SOP14
BU7445HFV	○	1	1.7 to 5.5	40	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.25	0.4	-40 to +85	HVSOF5
BU7445SHFV	○	1	1.7 to 5.5	40	1.0	0.001	8	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.25	0.4	-40 to +105	HVSOF5
BU7475HFV	○	1	1.7 to 5.5	9	1.0	0.001	7	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.05	0.1	-40 to +85	HVSOF5
BU7475SHFV	○	1	1.7 to 5.5	9	1.0	0.001	7	V _{SS} to V _{DD} -1.2	V _{SS} +0.1 to V _{DD} -0.1	100	60	80	0.05	0.1	-40 to +105	HVSOF5
BD1321G	○	1	2.7 to 5.5	130	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SSOP5
LMR321G	○	1	2.7 to 5.5	130	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SSOP5
LMR324F	○	4	2.7 to 5.5	410	1.0	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SOP14
LMR324FJ	○	4	2.7 to 5.5	410	1.0	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SOP-J14
LMR324FV	○	4	2.7 to 5.5	410	1.0	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SSOP-B14
LMR324FVJ	○	4	2.7 to 5.5	410	1.0	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	TSSOP-B14J
LMR341G	○	1	2.7 to 5.5	100	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	SSOP6
LMR342F	○	2	2.7 to 5.5	200	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	SOP8
LMR342FJ	○	2	2.7 to 5.5	200	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	SOP-J8
LMR342FV	○	2	2.7 to 5.5	200	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	SSOP-B8
LMR342FVJ	○	2	2.7 to 5.5	200	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	TSSOP-B8J
LMR342FVM	○	2	2.7 to 5.5	200	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	MSOP8
LMR342FVT	○	2	2.7 to 5.5	200	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	TSSOP-B8
LMR344F	○	4	2.7 to 5.5	400	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	SOP14
LMR344FJ	○	4	2.7 to 5.5	400	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	SOP-J14
LMR344FVJ	○	4	2.7 to 5.5	400	0.25	0.001	24	V _{SS} to V _{DD} -1.0	V _{SS} +0.06 to V _{DD} -0.06	103	80	85	1.0	2.0	-40 to +85	TSSOP-B14J
LMR358F	○	2	2.7 to 5.5	210	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SOP8
LMR358FJ	○	2	2.7 to 5.5	210	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SOP-J8
LMR358FV	○	2	2.7 to 5.5	210	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	SSOP-B8
LMR358FVJ	○	2	2.7 to 5.5	210	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	TSSOP-B8J
LMR358FVM	○	2	2.7 to 5.5	210	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	MSOP8
LMR358FVT	○	2	2.7 to 5.5	210	0.1	15	70	V _{EE} to V _{CC} -0.8	V _{EE} +0.08 to V _{CC} -0.04	110	90	90	1.0	3.0	-40 to +85	TSSOP-B8
LMR821G	○	1	2.5 to 5.5	280	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	SSOP5
LMR822F	○	2	2.5 to 5.5	560	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	SOP8
LMR822FJ	○	2	2.5 to 5.5	560	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	SOP-J8
LMR822FV	○	2	2.5 to 5.5	560	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	SSOP-B8
LMR822FVJ	○	2	2.5 to 5.5	560	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	TSSOP-B8J
LMR822FVM	○	2	2.5 to 5.5	560	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	MSOP8
LMR822FVT	○	2	2.5 to 5.5	560	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	TSSOP-B8
LMR824F	○	4	2.5 to 5.5	1,120	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	SOP14
LMR824FJ	○	4	2.5 to 5.5	1,120	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	SOP-J14
LMR824FVJ	○	4	2.5 to 5.5	1,120	1.0	30	16	V _{SS} to V _{DD} -0.9	V _{SS} +0.12 to V _{DD} -0.1	100	85	85	2.0	5.0	-40 to +85	TSSOP-B14J
TLR341G	○	1	1.8 to 5.5	70	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	90	95	1.2	2.2	-40 to +85	SSOP6
TLR342F	○	2	1.8 to 5.5	150	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	85	95	1.0	1.2	-40 to +85	SOP8
TLR342FJ	○	2	1.8 to 5.5	150	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	85	95	1.0	1.2	-40 to +85	SOP-J8
TLR342FVJ	○	2	1.8 to 5.5	150	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	85	95	1.0	1.2	-40 to +85	TSSOP-B8J
TLR342FVT	○	2	1.8 to 5.5	150	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	85	95	1.0	1.2	-40 to +85	TSSOP-B8
TLR344F	○	4	1.8 to 5.5	300	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	90	95	1.2	2.2	-40 to +85	SOP14
TLR344FJ	○	4	1.8 to 5.5	300	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	90	95	1.2	2.2	-40 to +85	SOP-J14
TLR344FVJ	○	4	1.8 to 5.5	300	0.3	0.001	8	V _{SS} to V _{DD} -1.0	V _{SS} +0.055 to V _{DD} -0.05	100	90	95	1.2	2.2	-40 to +85	TSSOP-B14J
LM324F	○	4	3.0 to 32.0	1,000	1.0	20	30	V _{EE} to V _{CC} -1.5	V _{EE</}							

Low Noise

Output Full Swing Operational Amplifiers																
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Input Referred Noise Voltage (μ Vrms)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/ μ s)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package
BA4510F	—	2	± 1 to ± 3.5	5.0	1.0	80	0.7	VEE to VCC-1.5	VEE+0.1 to VCC-0.1	90	80	80	5.0	10.0	-20 to +75	SOP8
BA4510FV	SSOP-B8															
BA4510FVM	MSOP8															
BA4510FVT	TSSOP-B8															
BA2107G	—	1	± 1 to ± 7	1.8	1.0	150	0.9	VEE to VCC-1.5	VEE+0.3 to VCC-0.3	80	74	80	4.0	12.0	-40 to +85	SSOP5
BA2115F	—	2	± 1 to ± 7	3.5	1.0	150	0.9	VEE to VCC-1.5	VEE+0.3 to VCC-0.3	80	74	80	4.0	12.0	-40 to +85	SOP8
BA2115FJ	SOP-J8															
BA2115FVM	MSOP8															
BA2115FVT	MSOP8															

Automotive Operational Amplifiers																															
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Input Referred Noise Voltage (μ Vrms)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/ μ s)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package	Automotive Grade AEC-Q100														
BA4558YF-M	●	2	± 4 to ± 15	3.0	0.5	60	1.8	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	1.0	2.0	-40 to +105	SOP8	YES														
BA4558YFV-M	SSOP-B8															YES															
BA4558YFVM-M	MSOP8															YES															
BA4560YF-M	SOP8															YES															
BA4560YFV-M	●	2	± 4 to ± 15	3.0	0.5	50	1.0	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	4.0	4.0	-40 to +105	SSOP-B8	YES														
BA4560YFVM-M	MSOP8															YES															
BA4580YF-M	●															2	± 2 to ± 16	6.0	0.3	100	0.8	VEE+1.5 to VCC-1.5	VEE+1.5 to VCC-1.5	110	110	110	5.0	10.0	-40 to +105	SOP8	YES
BA4580YFVM-M	MSOP8																													YES	
BA4584YFV-M	●	4	± 2 to ± 16	11.0	0.3	100	0.8	VEE+1.5 to VCC-1.5	VEE+1.5 to VCC-1.5	110	110	110	5.0	10.0	-40 to +105															SSOP-B14	YES
BA4584YFVM-M	SSOP-B14																													YES	

Dual Supply Voltage Operational Amplifiers																
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Input Referred Noise Voltage (μ Vrms)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/ μ s)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package
BA4558F	—	2	± 4 to ± 15	3.0	0.5	60	1.8	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	1.0	2.0	-40 to +85	SOP8
BA4558FJ	SOP-J8															
BA4558FV	SSOP-B8															
BA4558FVM	MSOP8															
BA4558FVT	—	TSSOP-B8														
BA4558RF	○	2	± 4 to ± 15	3.0	0.5	60	1.8	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	1.0	2.0	-40 to +105	SOP8
BA4558RFJ	SOP-J8															
BA4558RFV	SSOP-B8															
BA4558RFVM	MSOP8															
BA4558RFVT	○	TSSOP-B8														
BA4560F	—	2	± 4 to ± 15	4.0	0.5	50	1.0	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	4.0	10.0	-40 to +85	SOP8
BA4560FJ	SOP-J8															
BA4560FV	SSOP-B8															
BA4560FVM	MSOP8															
BA4560FVT	—	TSSOP-B8														
BA4560RF	○	2	± 4 to ± 15	3.0	0.5	50	1.0	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	4.0	4.0	-40 to +105	SOP8
BA4560RFJ	SOP-J8															
BA4560RFV	SSOP-B8															
BA4560RFVM	MSOP8															
BA4560RFVT	○	TSSOP-B8														
BA4564RFV	○	4	± 4 to ± 15	6.0	0.5	50	1.0	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	4.0	4.0	-40 to +105	SSOP-B14
BA15218F	—	2	± 2 to ± 16	5.0	0.5	50	1.0	VEE+1.0 to VCC-1.0	VEE+2.0 to VCC-2.0	110	90	90	3.0	10.0	-40 to +85	SOP8
BA14741F	—	4	± 2 to ± 18	3.0	1.0	60	2.0	VEE+1.5 to VCC-1.5	VEE+2.5 to VCC-2.5	100	100	100	1.0	2.0	-40 to +85	SOP14
BA14741FJ	SOP-J14															
BA15532F	—	2	± 3 to ± 20	8.0	0.5	200	1.5	VEE+2.0 to VCC-2.0	VEE+2.0 to VCC-2.0	94	100	100	8.0	20.0	-20 to +75	SOP8
BA4580RF	○	2	± 2 to ± 16	6.0	0.3	100	0.8	VEE+1.5 to VCC-1.5	VEE+1.5 to VCC-1.5	110	110	110	5.0	5.0	-40 to +105	SOP8
BA4580RFJ	SOP-J8															
BA4580RFVM	MSOP8															
BA4580RFVT	○															TSSOP-B8
BA4584FV	—	4	± 2 to ± 16	12.0	0.3	100	0.8	VEE+1.5 to VCC-1.5	VEE+1.5 to VCC-1.5	110	110	110	5.0	5.0	-40 to +85	SSOP-B14
BA4584RF	○	4	± 2 to ± 9.5	11.0	0.3	100	0.8	VEE+1.5 to VCC-1.5	VEE+1.5 to VCC-1.5	110	110	110	5.0	5.0	-40 to +105	SOP14
BA4584RFV	SSOP-B14															
LM4559F	—	2	± 4 to ± 18	3.3	0.5	40	0.7	VEE+2.0 to VCC-2.0	VEE+1.5 to VCC-1.5	110	100	100	3.5	4.0	-40 to +85	SOP8
LM4559FJ	SOP-J8															
LM4559FV	SSOP-B8															
LM4559FVT	TSSOP-B8															
LM4559FVM	MSOP8															
LM4559FVJ	TSSOP-B8&J															
LM4565F	—	2	± 4 to ± 18	4.5	0.5	70	0.6	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	100	100	5.0	10.0	-40 to +85	SOP8
LM4565FJ	SOP-J8															
LM4565FV	SSOP-B8															
LM4565FVT	TSSOP-B8															
LM4565FVM	MSOP8															
LM4565FVJ	TSSOP-B8&J															

Product Grade : ○—Standard ○—High Grade ●—Automotive Grade

Low Offset Voltage
Dual Supply Voltage Operational Amplifier

Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Output Voltage Range (V)	Voltage Gain (dB)	CMRR (dB)	PSRR (dB)	Slew Rate (V/μs)	Gain Bandwidth Product (MHz)	Operating Temperature (°C)	Package
BA4564WV	○	4	±4 to ±15	6.0	0.5	50	25	VEE+1.0 to VCC-1.0	VEE+1.0 to VCC-1.0	100	90	90	4.0	4.0	-40 to +105	SSOP-B14
Input-Output Full Swing Operational Amplifier																
BD5291G	—	1	1.7 to 5.5	0.65	0.1	0.001	6	VSS to VDD	VSS+0.1 to VDD-0.1	110	90	90	2.5	3.2	-40 to +85	SSOP5

Product Grade : — Standard ○ High Grade

Comparators

Standard
Open-Collector Comparators

Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package
BA2901F	○	4	2 to 36	0.8	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP14
BA2901FV	○											SSOP-B14
BA2901SF	○	4	2 to 36	0.8	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +105	SOP14
BA2901SFV	○											SSOP-B14
BA2901YF-LB	○	4	2 to 36	0.8	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP14
BA2903F	○	2	2 to 36	0.6	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP8
BA2903FV	○											SSOP-B8
BA2903FVM	○											MSOP8
BA2903SF	○	2	2 to 36	0.6	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +105	SOP8
BA2903SFV	○											SSOP-B8
BA2903SFVM	○											MSOP8
BA2903YF-LB	○	2	2 to 36	0.6	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP8
BA8391G	—	1	2 to 36	0.3	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +85	SSOP5
New LM2901F	○	4	3 to 32	1.2	1	50	16	VEE to VCC-1.5	120	1.0	-40 to +125	SOP14
New LM2901FJ	○											SOP-J14
New LM2901FV	○											SSOP-B14
New LM2901FVJ	○											TSSOP-B14J
New LM2903F	○	2	3 to 32	0.6	1	50	16	VEE to VCC-1.5	120	1.0	-40 to +125	SOP8
New LM2903FJ	○											SOP-J8
New LM2903FV	○											SSOP-B8
New LM2903FVJ	○											TSSOP-B8J
New LM2903FVM	○											MSOP8
New LM2903FVT	○											TSSOP-B8
New LM339F	—	4	3 to 32	1.2	1	50	16	VEE to VCC-1.5	120	1.0	-40 to +85	SOP14
New LM339FJ	—											SOP-J14
New LM339FV	—											SSOP-B14
New LM339FVJ	—											TSSOP-B14J
LM393F	—	2	3 to 32	0.6	1	50	16	VEE to VCC-1.5	120	1.0	-40 to +85	SOP8
New LM393FJ	—											SOP-J8
New LM393FV	—											SSOP-B8
New LM393FVJ	—											TSSOP-B8J
New LM393FVM	—											MSOP8
New LM393FVT	—											TSSOP-B8

Automotive Open-Collector Comparators

Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (mA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package	Automotive Grade AEC-Q100
BA2903YF-C	●	2	2 to 36	0.6	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP8	Yes
BA2903YFV-C	●											SSOP-B8	Yes
BA2903YFVM-C	●											MSOP8	Yes
BA2901YF-C	●	4	2 to 36	0.8	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP14	Yes
BA2901YFV-C	●											SSOP-B14	Yes
BA2903YF-M	●	2	2 to 36	0.6	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP8	Yes
BA2903YFV-M	●											SSOP-B8	Yes
BA2903YFVM-M	●											MSOP8	Yes
BA2901YF-M	●	4	2 to 36	0.8	2	50	16	VEE to VCC-1.5	100	1.3	-40 to +125	SOP14	Yes
BA2901YFV-M	●											SSOP-B14	Yes

Product Grade : — Standard ○ High Grade ● Automotive Grade

High Speed

Push-Pull Comparators												
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package
BU7251G	—	1	1.8 to 5.5	15	1	0.001	6	V _{SS} to V _{DD}	90	0.55	-40 to +85	SSOP5
BU7251SG	○										-40 to +105	SSOP5
BU7252F	—	2	1.8 to 5.5	35	1	0.001	6	V _{SS} to V _{DD}	90	0.55	-40 to +85	SOP8
BU7252FVM	—										-40 to +85	MSOP8
BU7252SF	○	2	1.8 to 5.5	35	1	0.001	6	V _{SS} to V _{DD}	90	0.55	-40 to +105	SOP8
BU7252SFVM	○										-40 to +105	MSOP8
BU5265HFV	—	1	1.8 to 5.5	22	1	0.001	3.5	V _{SS} to V _{DD}	90	0.5	-40 to +85	HVSOF5
BU5265SHFV	○										-40 to +105	HVSOF5

Open-Drain Comparators												
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package
BU7250G	—	1	1.8 to 5.5	15	1	0.001	6	V _{SS} to V _{DD}	90	0.75	-40 to +85	SSOP5
BU7250SG	○										-40 to +105	SSOP5
BU7253F	—	2	1.8 to 5.5	35	1	0.001	6	V _{SS} to V _{DD}	90	0.75	-40 to +85	SOP8
BU7253SF	○										-40 to +105	SOP8

Product Grade : —Standard ○High Grade

Low Power Consumption

Push-Pull Comparators												
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package
BU7231G	—	1	1.8 to 5.5	5	1	0.001	6	V _{SS} to V _{DD}	90	1.7	-40 to +85	SSOP5
BU7231SG	○										-40 to +105	SSOP5
BU7232F	—	2	1.8 to 5.5	10	1	0.001	6	V _{SS} to V _{DD}	90	1.7	-40 to +85	SOP8
BU7232FVM	—										-40 to +85	MSOP8
BU7232SF	○	2	1.8 to 5.5	10	1	0.001	6	V _{SS} to V _{DD}	90	1.7	-40 to +105	SOP8
BU7232SFVM	○										-40 to +105	MSOP8
BU5255HFV	—	1	1.8 to 5.5	6.5	1	0.001	3.5	V _{SS} to V _{DD}	90	1.6	-40 to +85	HVSOF5
BU5255SHFV	○										-40 to +105	HVSOF5

Open-Drain Comparators												
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package
BU7230G	—	1	1.8 to 5.5	5	1	0.001	6	V _{SS} to V _{DD}	90	1.8	-40 to +85	SSOP5
BU7230SG	○										-40 to +105	SSOP5
BU7233F	—	2	1.8 to 5.5	10	1	0.001	6	V _{SS} to V _{DD}	90	1.8	-40 to +85	SOP8
BU7233SF	○										-40 to +105	SOP8

Automotive Open-Drain Comparator													
Part No.	Product Grade	CH	Supply Voltage (V)	Circuit Current (μA)	Input Offset Voltage (mV)	Input Bias Current (nA)	Output Current (mA)	Input Voltage Range (V)	Voltage Gain (dB)	Response Time (μs)	Operating Temperature (°C)	Package	Automotive Grade AEC-Q100
BU7233YF-C	●	2	1.8 to 5.5	10	1	0.001	7	V _{SS} to V _{DD}	100	1.8	-40 to +125	SOP8	YES

Product Grade : —Standard ○High Grade ●Automotive Grade

Transistor Arrays

Darlington Transistor Arrays

Open Collectors

Part No.	Number of bit	Output Withstand Voltage (V)	Output Saturation Voltage (V)	Output Current (mA)	Input Resistance (k Ω)	Input/Output Relation	Input Active Level	Output Current Relation	Circuit Construction	Features	Package
BA12003BF	7	60	1.46*	500	2.7	Inverting Type	H	Sink	Darlington	Built-in surge absorbing diode	SOP16
BA12004BF	7	60	1.46*	500	10.5	Inverting Type	H	Sink	Darlington	Built-in surge absorbing diode	SOP16

* Output Current=350mA