



Low Saturation



# CMOS Regulator Series

**CMOS processes**

Ultra-low current consumption with high accuracy

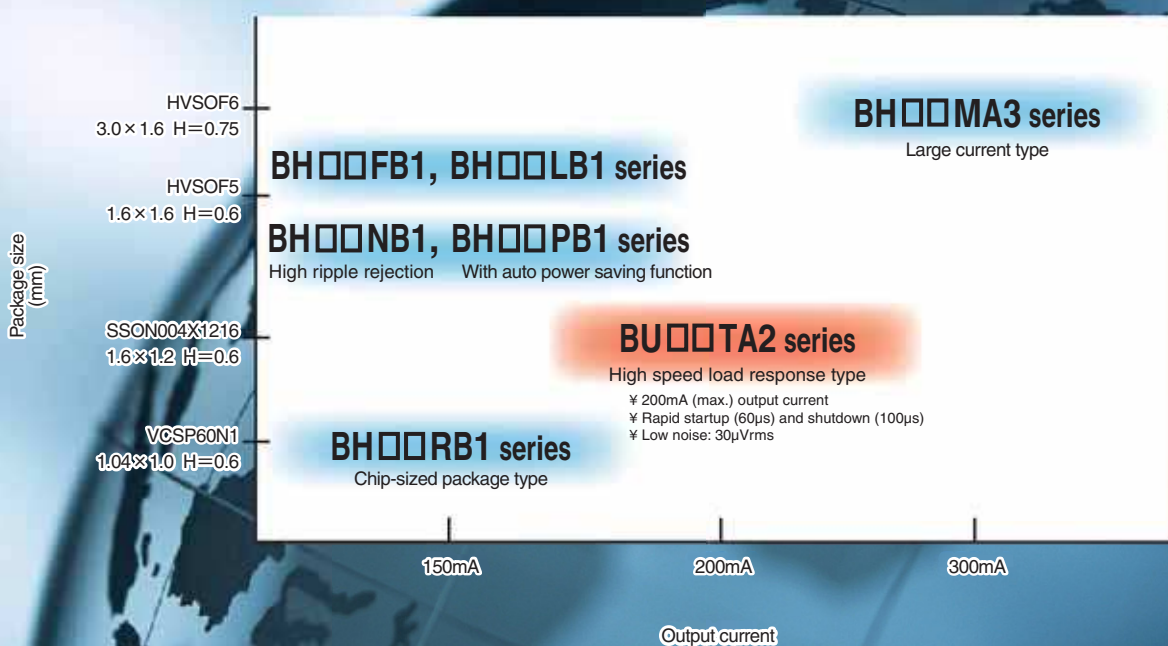
**Uniform manufacturing process focused on quality**

Complete, consistent production, from wafer fabrication to assembly, result in products of the highest quality.

**Wide lineup**

A broad array of products in different package types, output voltages and output currents are available to suit virtually any need

## Ultra-low Saturation CMOS Regulator Lineup



# Ultra-low Saturation CMOS Regulator Lineup

## Standard CMOS LDO Regulators

[□ indicates the output voltage (i.e. SSOP5/3.0V → BH30FB1WG, HVSO5/3.0V → BH30FB1WHFV)]

Series	Package	Output voltage(V)	Output voltage precision	Output current(mA)	Supply voltage(V)	Circuit current(μA)	Ripple rejection(dB)	Vsat(mV)	Load regulation lo=1~100mA (mV)	Input capacitor (μF)	Output capacity (μF)	Shut down function	Overcurrent protection	Temperature protection	Package (mm)
BH□□FB1WG series		2.5	±1%	150	2.5~5.5	40	70	250 (lo=100mA)	10	0.10	2.20	Available	Available	Available	SSOP5 (BH□□FB1WG, BH□□LB1WG) 2.8×2.9×1.05max.
		2.8													
		2.9													
		3.0													
		3.1													
3.3															
BH□□FB1WHFV series		2.5	±1%	150	2.5~5.5	40	70	-	10	0.10	1.00	Available	Available	Available	HVSO5 (BH□□FB1WHFV, BH□□LB1WHFV) 1.6×1.6×0.6max.
		2.8													
		2.9													
		3.0													
BH□□LB1WG series		1.5	±25mV	150	2.5~5.5	40	70	-	10	0.10	1.00	Available	Available	Available	HVSO5 (BH□□FB1WHFV, BH□□LB1WHFV) 1.6×1.6×0.6max.
		1.8													
		1.85													
BH□□LB1WHFV series		1.5	±25mV	150	2.5~5.5	40	70	-	10	0.10	1.00	Available	Available	Available	HVSO5 (BH□□FB1WHFV, BH□□LB1WHFV) 1.6×1.6×0.6max.
		1.8													
		1.85													

## Large Current CMOS LDO Regulators

[□ indicates the output voltage (i.e. 3.0V → BH30MA3WHFV)]

Series	Package	Output voltage(V)	Output voltage precision	Output current(mA)	Supply voltage(V)	Circuit current(μA)	Ripple rejection(dB)	Vsat(mV)	Load regulation lo=1~100mA (mV)	Input capacitor (μF)	Output capacity (μF)	Shut down function	Overcurrent protection	Temperature protection	Package (mm)														
BH□□MA3WHFV series		1.5	±25mV	300	2.5~5.5	65	60	-	6	1.00	1.00	Available	Available	Available	HVSO6 3.0×1.6×0.75max.														
		1.8																											
		2.5																											
																2.5	±1%	300	2.5~5.5	65	60	60	60	1.00	1.00	Available	Available	Available	HVSO6 3.0×1.6×0.75max.
																2.8													
																2.9													
																3.0													
																3.1													
																3.3													
																3.3													

## Ultra-compact CMOS LDO Regulators Suitable for High-density Mounting

[□ indicates the output voltage (i.e. 3.0V → BH30RB1WGUT)]

Series	Package	Output voltage(V)	Output voltage precision	Output current(mA)	Supply voltage(V)	Circuit current(μA)	Ripple rejection(dB)	Vsat(mV)	Load regulation lo=1~100mA (mV)	Input capacitor (μF)	Output capacity (μF)	Shut down function	Overcurrent protection	Temperature protection	Package (mm)														
BH□□RB1WGUT series		1.5	±25mV	150	2.5~5.5	34	63	-	2	1.00	1.00	Available	Available	Available	VCSP60N1 1.04×1.0×0.675max.														
		1.8																											
		2.5																											
																2.5	±1%	150	2.5~5.5	34	63	100 (lo=100mA)	2	1.00	1.00	Available	Available	Available	VCSP60N1 1.04×1.0×0.675max.
																2.8													
																2.9													
																3.0													
																3.1													
																3.3													
																3.3													

## High-ripple rejection CMOS LDO Regulators for High-frequency Circuits

[□ indicates the output voltage (i.e. 3.0V → BH30NB1WHFV)]

Series	Package	Output voltage(V)	Output voltage precision	Output current(mA)	Supply voltage(V)	Circuit current(μA)	Ripple rejection(dB)	Vsat(mV)	Load regulation lo=1~100mA (mV)	Input capacitor (μF)	Output capacity (μF)	Shut down function	Overcurrent protection	Temperature protection	Package (mm)
BH□□NB1WHFV series		2.5	±1%	150	2.5~5.5	60	80	250 (lo=100mA)	6	0.10	2.20	Available	Available	Available	HVSO5 1.6×1.6×0.6max.
		2.8													
		2.85													
		2.9													
		3.0													
		3.1													
		3.3													

## CMOS LDO Regulators with Auto Power Saving Function

[□ indicates the output voltage (i.e. 3.0V → BH30PB1WHFV)]

Series	Package	Output voltage(V)	Output voltage precision (High speed mode)	Output voltage precision (Low loc mode)	Output current (mA)	Supply voltage (V)	Circuit current (High speed mode) (μA)	Circuit current (High speed mode) (μA)	Ripple rejection (dB)	Vsat(mV)	Load regulation lo=0.1~200mA (mV)	Input capacitor (μF)	Output capacity (μF)	Shut down function	Overcurrent protection	Temperature protection	Discharge function	Package (mm)																
BH□□PB1WHFV series		1.2	±25mV	-3.3%~+4.3%	150	1.7~5.5	20	2	60 (High speed mode)	-	10	0.47	0.47	Available	Available	Available	Available	HVSO5 1.6×1.6×0.6max.																
		1.5																																
		1.8																																
				2.5															±1.0%	-3.0%~+3.8%	150	1.7~5.5	20	2	60 (High speed mode)	210 (lo=100mA)	10	0.47	0.47	Available	Available	Available	Available	HVSO5 1.6×1.6×0.6max.
				2.8																														
				2.85																														
				2.9																														
				3.0																														
				3.1																														
				3.3																														

## New Standard Full CMOS LDO Regulators

[□ indicates the output voltage (i.e. 3.0V → BU30TA2WNVX)]

Series	Package	Output voltage(V)	Output voltage precision (Low loc mode)	Output current (mA)	Supply voltage (V)	Circuit current (μA)	Ripple rejection (dB)	Vsat (mV)	Load regulation lo=0.1~200mA (mV)	Input capacitor (μF)	Output capacity (μF)	Shut down function	Overcurrent protection	Temperature protection	Discharge function	Package (mm)															
<b>New</b> BU□□TA2WNVX series		1.5	±25mV	200	2.5~5.5	40	70	-	20	1.0	1.0	Available	Available	Available	Available	SSON004 × 1216 1.6×1.2×0.6max.															
		1.8																													
		2.5																													
																	2.5	2.5V~3.4V ±1%	200	2.5~5.5	40	70	300 (lo=200mA)	20	1.0	1.0	Available	Available	Available	Available	SSON004 × 1216 1.6×1.2×0.6max.
																	2.6														
																	2.7														
																	2.8														
																	2.85														
																	2.9														
																	3.0														
																	3.1														
																	3.2														
																	3.3														
																	3.4														

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