

# SEIKO Battery Protection ICs and Voltage Regulators



RoHS Compliant This product is RoHS compliant.

## SII BATTERY PROTECTION ICs

### S-8241 Series for 1-Cell Batteries

The S-8241 Series is a protection IC for lithium-ion/lithium polymer rechargeable batteries and includes a high precision detection circuit and a delay circuit. It is the optimal IC for protection against overcharge, overdischarge and overcurrent in 1-cell lithium-ion/lithium polymer rechargeable battery packs.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Seiko Part No.	Package Type	Overcharge		Overdischarge		Overcurrent Detection Voltage1	0V Batt. Charge Function	Price Each			
			Detection Voltage	Release Voltage	Detection Voltage	Release Voltage			1	100	500	1000
<b>Surface Mount</b>												
628-8241ABPM-G	S-8241ABPMC-GBPT2G	SOT-23-5	4.350V	4.15V	2.3V	3.0V	0.2V	Available	.44	.37	.35	.32

### S-8242B Series for 2-Serial Cell Batteries

The S-8242B Series is a protection IC for 2-serial cell lithium-ion/lithium polymer rechargeable batteries and includes a high precision detection circuit and a delay circuit. These ICs are suitable for protecting 2-cell rechargeable lithium-ion/lithium polymer battery packs from overcharge, overdischarge and overcurrent.

For quantities greater than listed, call for quote.

<b>Surface Mount</b>												
628-8242BACT	S-8242BACT-T8T1G	TSSOP-8	4.35V	4.15V	2.3V	3.0V	0.3V	Available	.84	.76	.67	.61

### S-8244 for 1-Serial to 4-Serial Cell Batteries

The S-8244 Series is used for secondary protection of lithium-ion rechargeable batteries with one to four cells and includes a high precision voltage detector circuit and a delay circuit. Short circuits between cells accommodates series connection of one to four cells.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Seiko Part No.	Package Type	Overcharge		Output Form	Current Consumption		Price Each			
			Detection Voltage	Release Voltage		@ 3.5V each cell	@ 2.5V each cell	1	100	500	1000
<b>Surface Mount</b>											
628-8244AAA-G	S-8244AAAFN-CEAT2G	MSOP-8	4.45V	0.38+0.1V	CMOS output active "H"	3.0uA	2.4uA	1.02	.87	.82	.74

### S-8254 Series for 3-Serial or 4-Serial Cell Pack Batteries

The S-8254 Series is a protection IC for 3-serial or 4-serial cell lithium-ion rechargeable batteries and includes a high precision detection circuit and a delay circuit. It protects both 3-serial or 4-serial cells using the SEL pin for switching.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Seiko Part No.	Package Type	Overcharge		Overdischarge		Overcurrent Detection Voltage1	0V Batt. Charge Function	Price Each			
			Detection Voltage	Release Voltage	Detection Voltage	Release Voltage			1	100	500	1000
<b>Surface Mount</b>												
628-8254AAJ-G	S-8254AAJFT-TB-G	TSSOP-16	4.350V	4.150V	2.40V	3.00V	0.15V	Available	1.44	1.22	1.15	1.04

## SII HIGH PRECISION VOLTAGE REGULATORS

### S-812 Series

The S-812 Series is a three-terminal positive voltage regulator made using the CMOS process. Since this has higher precision output voltage and consumes less current than existing three-terminal voltage regulators, battery-powered portable equipment can have a higher performance and a longer service life.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Seiko Part No.	Package Type	Output Voltage (V)	I/O Voltage Difference (V) (Typ.)	Current Consumption (µA) (Typ.)	Input Voltage (V) (Max.)	Price Each			
							1	100	500	1000
<b>Surface Mount</b>										
628-812C25AU-G	S-812C25AUA-C2FT2G	SOT-89-3	2.5	0.590	0.9	10	.51	.46	.41	.35
628-812C25AM-G	S-812C25AMC-C2FT2G	SOT-23-5	2.5	0.590	0.9	10	.51	.46	.41	.35
628-812C30AU-G	S-812C30AUA-C2KT2G	SOT-89-3	3.0	0.440	1.0	16	.51	.46	.41	.35
628-812C30AM-G	S-812C30AMC-C2KT2G	SOT-23-5	3.0	0.440	1.0	16	.51	.46	.41	.35
628-812C33AU-G	S-812C33AUA-C2NT2G	SOT-89-3	3.3	0.370	1.0	16	.51	.46	.41	.35
628-812C33AM-G	S-812C33AMC-C2NT2G	SOT-23-5	3.3	0.370	1.0	16	.51	.46	.41	.35
628-812C35AU-G	S-812C35AUA-C2PT2G	SOT-89-3	3.5	0.340	1.0	16	.51	.46	.41	.35
628-812C35AM-G	S-812C35AMC-C2PT2G	SOT-23-5	3.5	0.340	1.0	16	.51	.46	.41	.35
628-812C40AU-G	S-812C40AUA-C2UT2G	SOT-89-3	4.0	0.270	1.2	16	.51	.46	.41	.35
628-812C40AM-G	S-812C40AMC-C2UT2G	SOT-23-5	4.0	0.270	1.2	16	.51	.46	.41	.35
628-812C50AU-G	S-812C50AUA-C3ET2G	SOT-89-3	5.0	0.160	1.2	16	.51	.46	.41	.35
628-812C50AM-G	S-812C50AMC-C3ET2G	SOT-23-5	5.0	0.160	1.2	16	.51	.46	.41	.35
<b>Thru-Hole</b>										
628-812C25AY-G	S-812C25AY-B-G	TO-92	2.5	0.290	0.9	10	.51	.46	.41	.35
628-812C30AY-G	S-812C30AY-B-G	TO-92	3.0	0.440	1.0	16	.51	.46	.41	.35
628-812C33AY-G	S-812C33AY-B-G	TO-92	3.3	0.370	1.0	16	.51	.46	.41	.35
628-812C35AY-G	S-812C35AY-B-G	TO-92	3.5	0.340	1.0	16	.51	.46	.41	.35
628-812C40AY-G	S-812C40AY-B-G	TO-92	4.0	0.270	1.2	16	.51	.46	.41	.35
628-812C50AY-G	S-812C50AY-B-G	TO-92	5.0	0.160	1.2	16	.51	.46	.41	.35

### S-814 Series

The S-814 Series is a low dropout voltage, high output voltage accuracy and low current consumption positive voltage regulator developed utilizing CMOS technology. Built-in low ON-resistance transistors provide low dropout voltage and large output current. A power-off circuit ensures long battery life. Various types of output capacitors can be used in the S-814 Series compared with the past CMOS voltage regulators. (i.e., small ceramic capacitors can also be used in the S-814 Series). These are recommended to be used for configuring portable devices and large output current applications, respectively.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	Seiko Part No.	Package Type	Output Voltage (V)	Dropout Voltage (V)(Typ.)	Output Current (Min.)(mA)	Accuracy (%)	Current Consumption (uA)(Typ.)	Input Voltage (V)(Max.)	Price Each			
									1	100	500	1000
<b>Surface Mount</b>												
628-814A20AMC-G	S-814A20AMC-BCKT2G	SOT-23-5	2.0	0.510	110	±2	30	10	.51	.46	.41	.35
628-814A20AUC-G	S-814A20AUC-BCKT2G	SOT-89-5	2.0	0.510	110	±2	30	10	.51	.46	.41	.35
628-814A27AMC-G	S-814A27AMC-BCRT2G	SOT-23-5	2.7	0.380	110	±2	30	10	.51	.46	.41	.35
628-814A30AMC-G	S-814A30AMC-BCUT2G	SOT-23-5	3.0	0.300	110	±2	30	10	.51	.46	.41	.35
628-814A30AUC-G	S-814A30AUC-BCUT2G	SOT-89-5	3.0	0.300	110	±2	30	10	.51	.46	.41	.35
628-814A33AMC-G	S-814A33AMC-BCXT2G	SOT-23-5	3.3	0.300	110	±2	30	10	.51	.46	.41	.35
628-814A33AUC-G	S-814A33AUC-BCXT2G	SOT-89-5	3.3	0.300	110	±2	30	10	.51	.46	.41	.35
628-814A35AMC-G	S-814A35AMC-BCZT2G	SOT-23-5	3.5	0.240	110	±2	30	10	.51	.46	.41	.35
628-814A40AMC-G	S-814A40AMC-BDET2G	SOT-23-5	4.0	0.200	110	±2	30	10	.51	.46	.41	.35
628-814A40AUC-G	S-814A40AUC-BDET2G	SOT-89-5	4.0	0.200	110	±2	30	10	.51	.46	.41	.35
628-814A50AMC-G	S-814A50AMC-BDOT2G	SOT-23-5	5.0	0.170	110	±2	30	10	.51	.46	.41	.35
628-814A50AUC-G	S-814A50AUC-BDOT2G	SOT-89-5	5.0	0.170	110	±2	30	10	.51	.46	.41	.35

### S-817 Series

The S-817 Series is a three-terminal positive voltage regulator made using the CMOS process. Since this has higher precision output voltage and consumes less current than existing three-terminal voltage regulators, battery-powered portable equipment can have a higher performance and a longer service life.

For quantities greater than listed, call for quote.

<b>Surface Mount</b>												
MOUSER STOCK NO.	Seiko Part No.	Package Type	Output Voltage (V)	Dropout Voltage (V)	Output Current (mA)	Accuracy (%)	Current Consumption (uA)	Input Voltage (V)	1	100	500	1000
628-817A15ANB-G	S-817A15ANB-CUET2G	SC-82AB	1.5	0.580	50	±2	1.2	10	.51	.46	.41	.35
628-817B15AMC-G	S-817B15AMC-CWET2G	SOT-23-5	1.5	0.580	50	±2	1.2	10	.51	.46	.41	.35
628-817B15AUA-G	S-817B15AUA-CWET2G	SOT-89-3	1.5	0.580	50	±2	1.2	10	.51	.46	.41	.35
628-817A18ANB-G	S-817A18ANB-CUHT2G	SC-82AB	1.8	0.580	50	±2	1.2	10	.51	.46	.41	.35
628-817B18AMC-G	S-817B18AMC-CWHT2G	SOT-23-5	1.8	0.580	50	±2	1.2	10	.51	.46	.41	.35
628-817B18AUA-G	S-817B18AUA-CWHT2G	SOT-89-3	1.8	0.580	50	±2	1.2	10	.51	.46	.41	.35
628-817A20ANB-G	S-817A20ANB-CUJT2G	SC-82AB	2.0	0.400	50	±2	1.2	10	.51	.46	.41	.35
628-817B20AMC-G	S-817B20AMC-CWJT2G	SOT-23-5	2.0	0.400	50	±2	1.2	10	.51	.46	.41	.35
628-817B20AUA-G	S-817B20AUA-CWJT2G	SOT-89-3	2.0	0.400	50	±2	1.2	10	.51	.46	.41	.35
628-817A25ANB-G	S-817A25ANB-CUOT2G	SC-82AB	2.5	0.310	50	±2	1.2	10	.51	.46	.41	.35
628-817B25AMC-G	S-817B25AMC-CWOT2G	SOT-23-5	2.5	0.310	50	±2	1.2	10	.51	.46	.41	.35
628-817B25AUA-G	S-817B25AUA-CWOT2G	SOT-89-3	2.5	0.310	50	±2	1.2	10	.51	.46	.41	.35

