

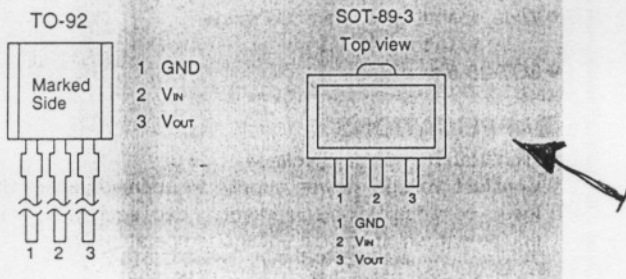
SEIKO I.

## HIGH-PRECISION VOLTAGE REGULATOR

S-812XXPG Series

The S-812XXPG Series is a positive voltage regulator. As it is a CMOS device, it features a very precise output voltage and low current consumption. These features translate into longer battery life, especially in designs for portable, and hand held equipment.

### PIN CONFIGURATIONS



### FEATURES

- Very-low current consumption
- Small input/output voltage difference
- High-precision output voltage:  $\pm 2.4\%$
- Excellent temperature coefficient of output voltage
- Wide operating voltage range
- Low load regulation
- TO-92 or SOT-89-3 package

### APPLICATIONS

- Constant voltage power supply for battery-powered equipment, communication equipment and video equipment

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### SPECIFICATIONS

Output voltage	TO-92	SOT-89-3*	Input/Output voltage difference Typ.	Input stability 1	Input stability 2	Load stability Typ.	Current consumption	Input voltage Max.
1.1V $\pm 2.4\%$	S-81211PG	S-81211PG-PA-X	0.05V	10mV to 50mV	10mV to 77mV	10mV	1.2 $\mu$ A typ. (3.2 $\mu$ A max.)	10V
1.5V $\pm 2.4\%$	S-81215PG	S-81215PG-PK-X	0.03V	7mV to 39mV	7mV to 105mV	80mV		
2.0V $\pm 2.4\%$	S-81220PG	S-81220PG-PS-X	0.63V	8mV to 48mV	8mV to 140mV	80mV		
2.4V $\pm 2.4\%$	S-81224PG	S-81224PG-PX-X	0.49V	10mV to 55mV	10mV to 168mV	80mV		
2.5V $\pm 2.4\%$	S-81225PG	S-81225PG-PH-X	0.59V	10mV to 57mV	10mV to 175mV	80mV		
3.0V $\pm 2.4\%$	S-81230PG	S-81230PG-PB-X	0.44V	39mV to 78mV	39mV to 210mV	60mV		16V
3.3V $\pm 2.4\%$	S-81233PG	S-81233PG-PF-X	0.37V	42mV to 84mV	42mV to 231mV	60mV		
3.5V $\pm 2.4\%$	S-81235PG	S-81235PG-PI-X	0.34V	44mV to 88mV	44mV to 245mV	60mV		
3.7V $\pm 2.4\%$	S-81237PG	S-81237PG-PE-X	0.31V	46mV to 92mV	46mV to 259mV	60mV		
4.0V $\pm 2.4\%$	S-81240PG	S-81240PG-PJ-X	0.27V	48mV to 96mV	48mV to 280mV	50mV		
4.5V $\pm 2.4\%$	S-81245PG	S-81245PG-P5-X	0.21V	52mV to 104mV	52mV to 315mV	50mV		
4.6V $\pm 2.4\%$	S-81246PG	S-81246PG-PM-X	0.20V	53mV to 105mV	53mV to 322mV	50mV		
5.0V $\pm 2.4\%$	S-81250PG	S-81250PG-PD-X	0.16V	55mV to 110mV	55mV to 350mV	40mV		
5.2V $\pm 2.4\%$	S-81252PG	S-81252PG-PL-X	0.15V	57mV to 113mV	57mV to 364mV	40mV		

\* The last digit "X" changes as follows depending upon the packing form.  
 X=S : Stick  
 X=T1 or T2 : Tape  
 Please ask our sales person if you need another output voltage product.

## VOLTAGE REGULATOR

S-802/812 Series

### SPECIFICATIONS

Output voltage	TO-92	SOT-89-3*	Input stability Typ.	Load stability Typ.	Input/Output voltage difference Typ.	Current consumption Typ.	Input voltage Max.
-3V $\pm 5\%$	S-80230AG	S-80230AG-GA-X	0.1%/V( $V_{IN} = -10V$ to $-4V$ )	60mV( $I_{OUT} = 1$ to 20mA)	60mV( $I_{OUT} = 1$ mA)	2.5 $\mu$ A	-10V
-5V $\pm 5\%$	S-80250AG	S-80250AG-GB-X	0.1%/V( $V_{IN} = -10V$ to $-6V$ )	40mV( $I_{OUT} = 1$ to 40mA)	30mV( $I_{OUT} = 1$ mA)	3.0 $\mu$ A	-10V
1.5V $\pm 5\%$	S-81215AG	S-81215AG-RK-X	0.1%/V( $V_{IN} = 2.5V$ to 10V)	80mV( $I_{OUT} = 1$ to 7mA)	300mV( $I_{OUT} = 0.5$ mA)	2.2 $\mu$ A	10V
2.5V $\pm 5\%$	—	S-81225AG-RH-X	0.1%/V( $V_{IN} = 3.5V$ to 10V)	80mV( $I_{OUT} = 1$ to 10mA)	100mV( $I_{OUT} = 1$ mA)	2.5 $\mu$ A	10V
3.0V $\pm 5\%$	S-81230AG	S-81230AG-RB-X	0.1%/V( $V_{IN} = 4V$ to 10V)	60mV( $I_{OUT} = 1$ to 20mA)	60mV( $I_{OUT} = 1$ mA)	2.5 $\mu$ A	10V
3.5V $\pm 5\%$	—	S-81235AG-RI-X	0.1%/V( $V_{IN} = 4.5V$ to 10V)	60mV( $I_{OUT} = 1$ to 30mA)	60mV( $I_{OUT} = 1$ mA)	2.5 $\mu$ A	10V
3.7V $\pm 5\%$	S-81237AG	S-81237AG-RE-X	0.1%/V( $V_{IN} = 4.3V$ to 10V)	60mV( $I_{OUT} = 1$ to 20mA)	60mV( $I_{OUT} = 1$ mA)	2.0 $\mu$ A	10V
4.0V $\pm 5\%$	—	S-81240AG-RJ-X	0.1%/V( $V_{IN} = 5V$ to 10V)	50mV( $I_{OUT} = 1$ to 30mA)	50mV( $I_{OUT} = 1$ mA)	3.0 $\mu$ A	10V
5.0V $\pm 5\%$	S-81250HG	S-81250HG-RD-X	0.1%/V( $V_{IN} = 6V$ to 10V)	40mV( $I_{OUT} = 1$ to 40mA)	30mV( $I_{OUT} = 1$ mA)	3.0 $\mu$ A	12V
5.2V $\pm 5\%$	S-81252HG	S-81252HG-RL-X	0.1%/V( $V_{IN} = 6.2V$ to 15V)	40mV( $I_{OUT} = 1$ to 40mA)	30mV( $I_{OUT} = 1$ mA)	3.0 $\mu$ A	15V

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