

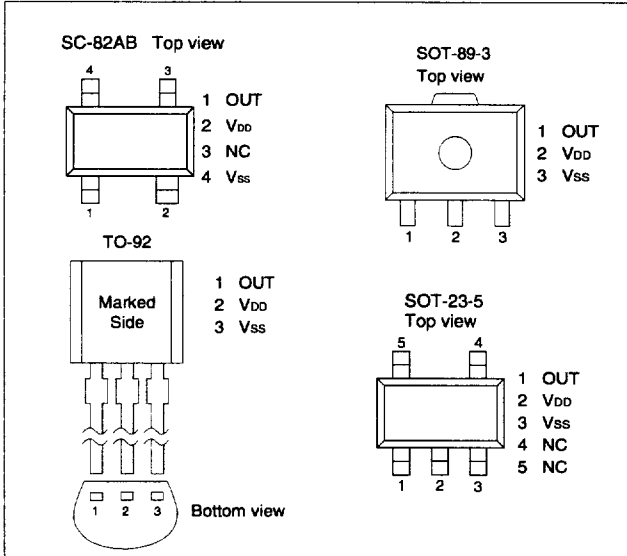
\* S-807 Series will be summarized into S-808 Series.

# SUPER-SMALL PACKAGE HIGH PRECISION VOLTAGE DETECTOR

# S-808 Series

Available in super-small SC-82AB package, the devices are available at an accuracy of  $\pm 2.0\%$ . They feature both N-channel and CMOS output.

## PIN CONFIGURATIONS



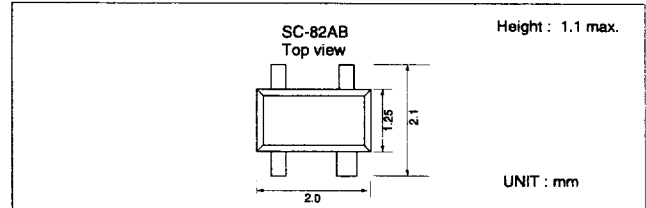
## FEATURES

- Very-low current consumption
  - 1.3 $\mu$ A typ. ( $V_{DD}=1.5V$ ): When detection voltage is 1.4Vtyp. or less.
  - 0.8 $\mu$ A typ. ( $V_{DD}=3.5V$ ): When detection voltage is 1.5Vtyp. or more.
- Accuracy :  $\pm 2.0\%$
- Operating voltage range
  - 0.7V to 5.0V : When detection voltage is 1.4Vtyp. or less.
  - 0.95V to 10.0V : When detection voltage is 1.5Vtyp. or more.
- Hysteresis characteristics 5% typ.
- Detection voltage : 0.8V to 6.0V (0.1V step)
- Output forms : Nch open drain active "L" output  
CMOS active "L" output

## APPLICATIONS

- Battery checker
- Power failure detector
- Power monitor for pagers, calculators, electronic organizers, remote controllers
- Constant voltage power monitor for cameras, video equipment, communication devices
- Power monitor for microcomputers and reset for CPUs

## DIMENSIONS (Typ.)



## SPECIFICATIONS

Detection voltage range (V)	Hysteresis width (mV) typ. (V)	Nch open drain (Low)					CMOS output (Low)				Current consumption typ. (V <sub>DD</sub> )
		SC-82AB	TO-92	SOT-89-3	SOT-23-5	SC-82AB	TO-92	SOT-89-3	SOT-23-5		
0.8V $\pm$ 2.0%	0.034	S-80806ANNP-E7Y-T2	-	-	-	S-80806ALNP-E5Y-T2	-	-	-	1.3 $\mu$ A (V <sub>DD</sub> =1.5V)	
0.9V $\pm$ 2.0%	0.044	S-80809ANNP-E7Z-T2	-	-	-	S-80809ALNP-E6Z-T2	-	-	-		
1.0V $\pm$ 2.0%	0.054	S-80810ANNP-E7O-T2	-	-	-	S-80810ALNP-E5O-T2	-	-	-		
1.1V $\pm$ 2.0%	0.064	S-80811ANNP-E7I-T2	-	-	-	S-80811ALNP-E5I-T2	-	-	-		
1.2V $\pm$ 2.0%	0.073	S-80812ANNP-E7Z-T2	-	-	-	S-80812ALNP-E5Z-T2	-	-	-		
1.3V $\pm$ 2.0%	0.083	S-80813ANNP-EDA-T2	-	-	-	S-80813ALNP-EAA-T2	-	-	-	1.3 $\mu$ A (V <sub>DD</sub> =2.0V)	
1.4V $\pm$ 2.0%	0.093	S-80814ANNP-EDB-T2	-	-	-	S-80814ALNP-EAB-T2	-	-	-		
1.5V $\pm$ 2.0%	0.075	S-80815ANNP-EDC-T2	S-80815ANY	S-80815ANUP-EDC-X	-	S-80815ALNP-EAC-T2	S-80815ALY	S-80815ALUP-EAC-X	S-80815ALMP-EAC-X		
1.6V $\pm$ 2.0%	0.080	S-80816ANNP-EDD-T2	S-80816ANY	S-80816ANUP-EDD-X	-	S-80816ALNP-EAD-T2	S-80816ALY	S-80816ALUP-EAD-X	-		
1.7V $\pm$ 2.0%	0.085	S-80817ANNP-EDE-T2	S-80817ANY	S-80817ANUP-EDE-X	S-80817ANMP-EDE-X	S-80817ALNP-EAE-T2	S-80817ALY	S-80817ALUP-EAE-X	-		
1.8V $\pm$ 2.0%	0.090	S-80818ANNP-EDF-T2	S-80818ANY	S-80818ANUP-EDF-X	S-80818ANMP-EDF-X	S-80818ALNP-EAF-T2	S-80818ALY	S-80818ALUP-EAF-X	S-80818ALMP-EAF-X		
1.9V $\pm$ 2.0%	0.095	S-80819ANNP-EDG-T2	S-80819ANY	S-80819ANUP-EDG-X	S-80819ANMP-EDG-X	S-80819ALNP-EAG-T2	S-80819ALY	S-80819ALUP-EAG-X	S-80819ALMP-EAG-X		
2.0V $\pm$ 2.0%	0.100	S-80820ANNP-EDH-T2	S-80820ANY	S-80820ANUP-EDH-X	S-80820ANMP-EDH-X	S-80820ALNP-EAH-T2	S-80820ALY	S-80820ALUP-EAH-X	S-80820ALMP-EAH-X	0.8 $\mu$ A (V <sub>DD</sub> =3.5V)	
2.1V $\pm$ 2.0%	0.105	S-80821ANNP-EDJ-T2	S-80821ANY	S-80821ANUP-EDJ-X	S-80821ANMP-EDJ-X	S-80821ALNP-EAJ-T2	S-80821ALY	S-80821ALUP-EAJ-X	S-80821ALMP-EAJ-X		
2.2V $\pm$ 2.0%	0.110	S-80822ANNP-EDK-T2	S-80822ANY	S-80822ANUP-EDK-X	S-80822ANMP-EDK-X	S-80822ALNP-EAK-T2	S-80822ALY	S-80822ALUP-EAK-X	S-80822ALMP-EAK-X		
2.3V $\pm$ 2.0%	0.115	S-80823ANNP-EDL-T2	S-80823ANY	S-80823ANUP-EDL-X	S-80823ANMP-EDL-X	S-80823ALNP-EAL-T2	S-80823ALY	S-80823ALUP-EAL-X	S-80823ALMP-EAL-X		
2.4V $\pm$ 2.0%	0.120	S-80824ANNP-EDM-T2	S-80824ANY	S-80824ANUP-EDM-X	S-80824ANMP-EDM-X	S-80824ALNP-EAM-T2	S-80824ALY	S-80824ALUP-EAM-X	-		
2.5V $\pm$ 2.0%	0.125	S-80825ANNP-EDN-T2	S-80825ANY	S-80825ANUP-EDN-X	S-80825ANMP-EDN-X	S-80825ALNP-EAN-T2	S-80825ALY	S-80825ALUP-EAN-X	S-80825ALMP-EAN-X		
2.6V $\pm$ 2.0%	0.130	S-80826ANNP-EDP-T2	S-80826ANY	S-80826ANUP-EDP-X	-	S-80826ALNP-EAP-T2	S-80826ALY	S-80826ALUP-EAP-X	-		
2.7V $\pm$ 2.0%	0.135	S-80827ANNP-EDQ-T2	S-80827ANY	S-80827ANUP-EDQ-X	S-80827ANMP-EDQ-X	S-80827ALNP-EAQ-T2	S-80827ALY	S-80827ALUP-EAQ-X	S-80827ALMP-EAQ-X		
2.8V $\pm$ 2.0%	0.140	S-80828ANNP-EDR-T2	S-80828ANY	S-80828ANUP-EDR-X	S-80828ANMP-EDR-X	S-80828ALNP-EAR-T2	S-80828ALY	S-80828ALUP-EAR-X	S-80828ALMP-EAR-X		
2.9V $\pm$ 2.0%	0.145	S-80829ANNP-EDS-T2	S-80829ANY	S-80829ANUP-EDS-X	S-80829ANMP-EDS-X	S-80829ALNP-EAS-T2	S-80829ALY	S-80829ALUP-EAS-X	-		
3.0V $\pm$ 2.0%	0.150	S-80830ANNP-EDT-T2	S-80830ANY	S-80830ANUP-EDT-X	S-80830ANMP-EDT-X	S-80830ALNP-EAT-T2	S-80830ALY	S-80830ALUP-EAT-X	S-80830ALMP-EAT-X		
3.1V $\pm$ 2.0%	0.155	S-80831ANNP-EDV-T2	S-80831ANY	S-80831ANUP-EDV-X	-	S-80831ALNP-EAV-T2	S-80831ALY	S-80831ALUP-EAV-X	-		
3.2V $\pm$ 2.0%	0.160	S-80832ANNP-EDW-T2	S-80832ANY	S-80832ANUP-EDW-X	S-80832ANMP-EDW-X	S-80832ALNP-EAW-T2	S-80832ALY	S-80832ALUP-EAW-X	S-80832ALMP-EAW-X	0.9 $\mu$ A (V <sub>DD</sub> =4.5V)	
3.3V $\pm$ 2.0%	0.165	S-80833ANNP-EDX-T2	S-80833ANY	S-80833ANUP-EDX-X	S-80833ANMP-EDX-X	S-80833ALNP-EAX-T2	S-80833ALY	S-80833ALUP-EAX-X	S-80833ALMP-EAX-X		
3.4V $\pm$ 2.0%	0.170	S-80834ANNP-EDY-T2	S-80834ANY	S-80834ANUP-EDY-X	S-80834ANMP-EDY-X	S-80834ALNP-EAY-T2	S-80834ALY	S-80834ALUP-EAY-X	-		
3.5V $\pm$ 2.0%	0.175	S-80835ANNP-EDZ-T2	S-80835ANY	S-80835ANUP-EDZ-X	S-80835ANMP-EDZ-X	S-80835ALNP-EAZ-T2	S-80835ALY	S-80835ALUP-EAZ-X	S-80835ALMP-EAZ-X		
3.6V $\pm$ 2.0%	0.180	S-80836ANNP-ED0-T2	S-80836ANY	S-80836ANUP-ED0-X	S-80836ANMP-ED0-X	S-80836ALNP-EA0-T2	S-80836ALY	S-80836ALUP-EA0-X	S-80836ALMP-EA0-X		
3.7V $\pm$ 2.0%	0.185	S-80837ANNP-ED1-T2	S-80837ANY	S-80837ANUP-ED1-X	-	S-80837ALNP-EA1-T2	S-80837ALY	S-80837ALUP-EA1-X	-		
3.8V $\pm$ 2.0%	0.190	S-80838ANNP-ED2-T2	S-80838ANY	S-80838ANUP-ED2-X	S-80838ANMP-ED2-X	S-80838ALNP-EA2-T2	S-80838ALY	S-80838ALUP-EA2-X	-		
3.9V $\pm$ 2.0%	0.195	S-80839ANNP-ED3-T2	S-80839ANY	S-80839ANUP-ED3-X	S-80839ANMP-ED3-X	S-80839ALNP-EA3-T2	S-80839ALY	S-80839ALUP-EA3-X	-		
4.0V $\pm$ 2.0%	0.200	S-80840ANNP-ED4-T2	S-80840ANY	S-80840ANUP-ED4-X	S-80840ANMP-ED4-X	S-80840ALNP-EA4-T2	S-80840ALY	S-80840ALUP-EA4-X	S-80840ALMP-EA4-X		
4.1V $\pm$ 2.0%	0.205	S-80841ANNP-ED5-T2	S-80841ANY	S-80841ANUP-ED5-X	-	S-80841ALNP-EA5-T2	S-80841ALY	S-80841ALUP-EA5-X	-		
4.2V $\pm$ 2.0%	0.210	S-80842ANNP-ED6-T2	S-80842ANY	S-80842ANUP-ED6-X	S-80842ANMP-ED6-X	S-80842ALNP-EA6-T2	S-80842ALY	S-80842ALUP-EA6-X	S-80842ALMP-EA6-X		
4.3V $\pm$ 2.0%	0.215	S-80843ANNP-ED7-T2	S-80843ANY	S-80843ANUP-ED7-X	-	S-80843ALNP-EA7-T2	S-80843ALY	S-80843ALUP-EA7-X	-		
4.4V $\pm$ 2.0%	0.220	S-80844ANNP-ED8-T2	S-80844ANY	S-80844ANUP-ED8-X	S-80844ANMP-ED8-X	S-80844ALNP-EA8-T2	S-80844ALY	S-80844ALUP-EA8-X	-		
4.5V $\pm$ 2.0%	0.225	S-80845ANNP-ED9-T2	S-80845ANY	S-80845ANUP-ED9-X	S-80845ANMP-ED9-X	S-80845ALNP-EA9-T2	S-80845ALY	S-80845ALUP-EA9-X	S-80845ALMP-EA9-X		
4.6V $\pm$ 2.0%	0.230	S-80846ANNP-EJA-T2	S-80846ANY	S-80846ANUP-EJA-X	-	S-80846ALNP-EEA-T2	S-80846ALY	S-80846ALUP-EEA-X	-		
4.7V $\pm$ 2.0%	0.235	S-80847ANNP-EJB-T2	S-80847ANY	S-80847ANUP-EJB-X	-	S-80847ALNP-EEB-T2	S-80847ALY	S-80847ALUP-EEB-X	-		
4.8V $\pm$ 2.0%	0.240	S-80848ANNP-EJC-T2	S-80848ANY	S-80848ANUP-EJC-X	-	S-80848ALNP-EEC-T2	S-80848ALY	S-80848ALUP-EEC-X	-	1.0 $\mu$ A (V <sub>DD</sub> =6.0V)	
4.9V $\pm$ 2.0%	0.245	S-80849ANNP-EJD-T2	S-80849ANY	S-80849ANUP-EJD-X	-	S-80849ALNP-EEJ-T2	S-80849ALY	S-80849ALUP-EEJ-X	S-80849ALMP-EEJ-X		
5.0V $\pm$ 2.0%	0.250	S-80850ANNP-EJE-T2	S-80850ANY	S-80850ANUP-EJE-X	S-80850ANMP-EJE-X	S-80850ALNP-EEE-T2	S-80850ALY	S-80850ALUP-EEE-X	-		
5.1V $\pm$ 2.0%	0.255	S-80851ANNP-EJF-T2	S-80851ANY	S-80851ANUP-EJF-X	S-80851ANMP-EJF-X	S-80851ALNP-EEF-T2	S-80851ALY	S-80851ALUP-EEF-X	S-80851ALMP-EEF-X		
5.2V $\pm$ 2.0%	0.260	S-80852ANNP-EJG-T2	-	S-80852ANUP-EJG-X	-	S-80852ALNP-EEG-T2	-	S-80852ALUP-EEG-X	S-80852ALMP-EEG-T2		
5.3V $\pm$ 2.0%	0.265	S-80853ANNP-EJH-T2	S-80853ANY	S-80853ANUP-EJH-X	-	S-80853ALNP-EEH-T2	-	S-80853ALUP-EEH-X	-		
5.4V $\pm$ 2.0%	0.270	S-80854ANNP-EJL-T2	-	S-80854ANUP-EJL-X	-	S-80854ALNP-EEJ-T2	-	S-80854ALUP-EEJ-X	-		
5.5V $\pm$ 2.0%	0.275	S-80855ANNP-EJK-T2	-	S-80855ANUP-EJK-X	-	S-80855ALNP-EEK-T2	-	S-80855ALUP-EEK-T2	-		
5.6V $\pm$ 2.0%	0.280	S-80856ANNP-EJL-T2	-	S-80856ANUP-EJL-X	-	S-80856ALNP-EEL-T2	-	S-80856ALUP-EEL-T2	-		
5.7V $\pm$ 2.0%	0.285	S-80857ANNP-EJM-T2	-	S-80857ANUP-EJM-X	-	S-80857ALNP-EEJ-T2	-	S-80857ALUP-EEJ-T2	-		
5.8V $\pm$ 2.0%	0.290	S-80858ANNP-EJN-T2	-	S-80858ANUP-EJN-X	-	S-80858ALNP-EEN-T2	-	S-80858ALUP-EEN-T2	-	1.0 $\mu$ A (V <sub>DD</sub> =7.5V)	
5.9V $\pm$ 2.0%	0.295	S-80859ANNP-EJP-T2	-	S-80859ANUP-EJP-X	-	S-80859ALNP-EEP-T2	-	S-80859ALUP-EEP-T2	-		
6.0V $\pm$ 2.0%	0.300	S-80860ANNP-EJQ-T2	-	S-80860ANUP-EJQ-T2	-	S-80860ALNP-EEQ-T2	-	S-80860ALUP-EEQ-T2	-		

\*\* Some products described here are in under development. Please contact us for Samples.  
\*\*\* The last digit "X" changes into "T1" or "T2" depending upon the direction of ICs on the tape.