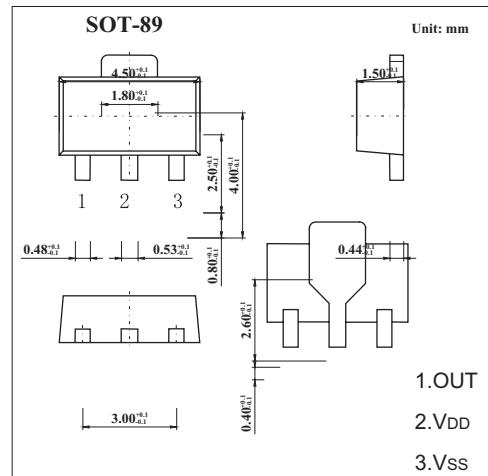


High-Precision Voltage Detector

S-80725AL-AN-X

■ Features

- Ultra-Low Current Consumption 1.0 μ A Typ.(V_{DD} = 4.5V)
- High-Precision Detection Voltage $\pm 2.4\%$
- Wide Operating Voltage Range 1.0 to 15V
- Good Hysteresis Characteristics 5% Typ.
- Wide Operating Temperature Range -30°C to +80 °C
- CMOS Output Active Low



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Power Supply Voltage	V _{DD} - V _{SS}	18	V
Input Voltage	V _{IN}	V _{SS} -0.3 to V _{DD} +0.3	
Output Voltage	V _{OUT}	V _{SS} -0.3 to V _{IN} +0.3	
Output Current	I _{OUT}	50	
Power Dissipation	P _D	200	
Operating Temperature	T _{opr}	-30 to +80	
Storage Temperature	T _{stg}	-40 to +125	°C

Caution: Keep static electricity to a minimum.

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit	Test Circuit
Detection Voltage	-V _{DET}		2.440	2.500	2.560	V	1
Hysteresis Width	V _{HYS}		-V _{DET} x0.02	-V _{DET} x0.05	-V _{DET} x0.08	V	1
Current Consumption	I _{SS}	V _{DD} = 4.5V	—	1.4	3.5	μA	2
Operating Voltage	V _{DD}		1.0	—	15.0	V	1
Output Current	I _{OUT}	V _{DS} = 0.5V , V _{DD} = 4.8V	0.36	0.62	—	mA	4
Temperature Characteristic of -V _{DET}	$\frac{\Delta V_{DET}}{\Delta T_a}$	T _a = -30°C to 80°C	—	±0.31	—	mV/°C	—