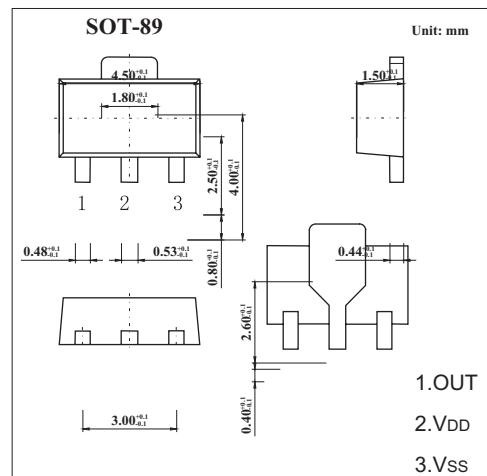


## High-Precision Voltage Detector

### S-80737AN-D1-X

#### ■ Features

- Ultra-Low Current Consumption 1.0 $\mu$ A Typ.(VDD = 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
- Nch Open-Drain



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Power Supply Voltage	VDD - VSS	18	V
Input Voltage	VIN	Vss -0.3 to VDD +0.3	
Output Voltage	VOUT	Vss -0.3 to 18	
Output Current	IOUT	50	
Power Dissipation	PD	200	
Operating Temperature	T <sub>opr</sub>	-30 to +80	
Storage Temperature	T <sub>stg</sub>	-40 to +125	

Caution: Keep static electricity to a minimum.

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit	Test Circuit
Detection Voltage	-VDET		3.611	3.700	3.789	V	1
Hysteresis Width	VHYS		-VDET x0.02	-VDET x0.05	-VDET x0.08	V	1
Current Consumption	I <sub>SS</sub>	VDD = 6.0V	—	1.0	3.0	$\mu$ A	2
Operating Voltage	VDD		1.0	—	15.0	V	1
Output Current	IOUT	V <sub>DS</sub> = 0.5V , VDD = 1.2V	0.23	0.50	—	mA	3
		V <sub>DS</sub> = 0.5V , VDD = 2.4V	1.60	3.70	—		
Temperature Characteristic of -VDET	$\frac{\Delta V_{DET}}{\Delta T_a}$	T <sub>a</sub> = -30°C to 80°C	—	$\pm 0.46$	—	mV/°C	—