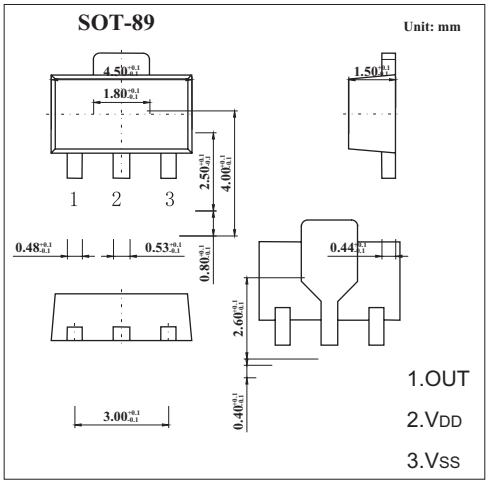
High-Precision Voltage Detector

S-80718AL-AF-X



■ Features

- Ultra-Low Current Consumption 1.0μA Typ.(V_{DD} = 4.5V)
- High-Precision Detection Voltage ±2.4%
- Wide Operating Voltage Range 1.0 to 15V
- Good Hysteresis Characteristics 5% Typ.
- Wide Operating Temperature Range -30℃ to +80 ℃
- CMOS Output Active Low

■ Absolute Maximum Ratings Ta = 25℃

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}	Vss -0.3 to V_{IN} +0.3	
Output Current	I_{OUT}	50	mA
Power Dissipation	P_D	200	mW
Operating Temperature	T_{opr}	-30 to +80	℃
Storage Temperature	T_{stg}	-40 to +125	

Caution: Keep static electricity electricity to a minimum.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Min	Typ	Max	Unit	Test Circuit
Detection Voltage	$-V_{DET}$		1.756	1.800	1.844	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} = 3.0V	—	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 $-V_{DET}$	$\frac{\Delta -V_{DET}}{\Delta Ta}$	Ta = -30℃ to 80℃	—	±0.23	—	mV/℃	—