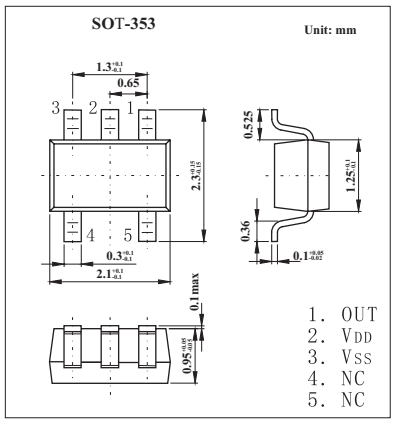
High-Precision Voltage Detector

S-80740SN-D4-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 ℃
- Nch Open-Drain

■ 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 18	
Output Current	I_{OUT}	50	mA
Power Dissipation	P_D	150	mW
Operating Temperature	Topr	-30 to +80	℃
Storage Temperature	Tstg	-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}		3.904	4.000	4.096	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} = 6.0V	—	1.0	3.0	μA	2
Operating Voltage	V_{DD}		1.0	—	15.0	V	1
Output Current	I_{OUT}	V_{DS} = 0.5V , V_{DD} = 1.2V	0.23	0.50	—	mA	3
		V_{DS} = 0.5V , V_{DD} = 2.4V	1.60	3.70			
		V_{DS} = 0.5V , V_{DD} = 3.6V	3.18	7.00			
Temperature Characteristic of -V_{DET}	$\frac{\Delta\text{-}V_{DET}}{\Delta Ta}$	Ta = -30℃ to 80℃	—	±0.50	—	mV/℃	—