

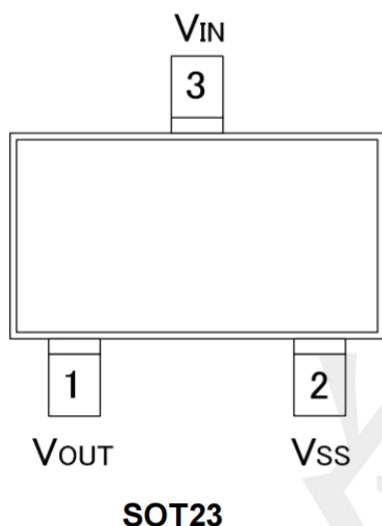
Features

- Output voltage accuracy: $\pm 2\%$
- Static working current: 2 μ A
- Detection voltage range: 1.0-5.0V (100mV step)
- Operating voltage range: 0.7V~6.5V
- Output compatibility application:
CMOS or N-channel open drain

Applications

- Microprocessor reset circuitry
- Memory battery back-up circuits
- Power-on reset circuits
- Power failure detection
- System battery life and charge voltage monitors

Pin Definition



Ordering Information

TP61C	C	XX	XX	S3
	C:CMOS output			S3:SOT23
	Voltage detection threshold: 25=2.5V 33=3.3V 50=5.0V			Voltage detection accuracy: 02= $\pm 2\%$

PIN CONFIGURATION

Pin Number	Pin Name	Pin Function
1	VOUT	Output pin
2	VSS	Ground
3	VIN	Input pin

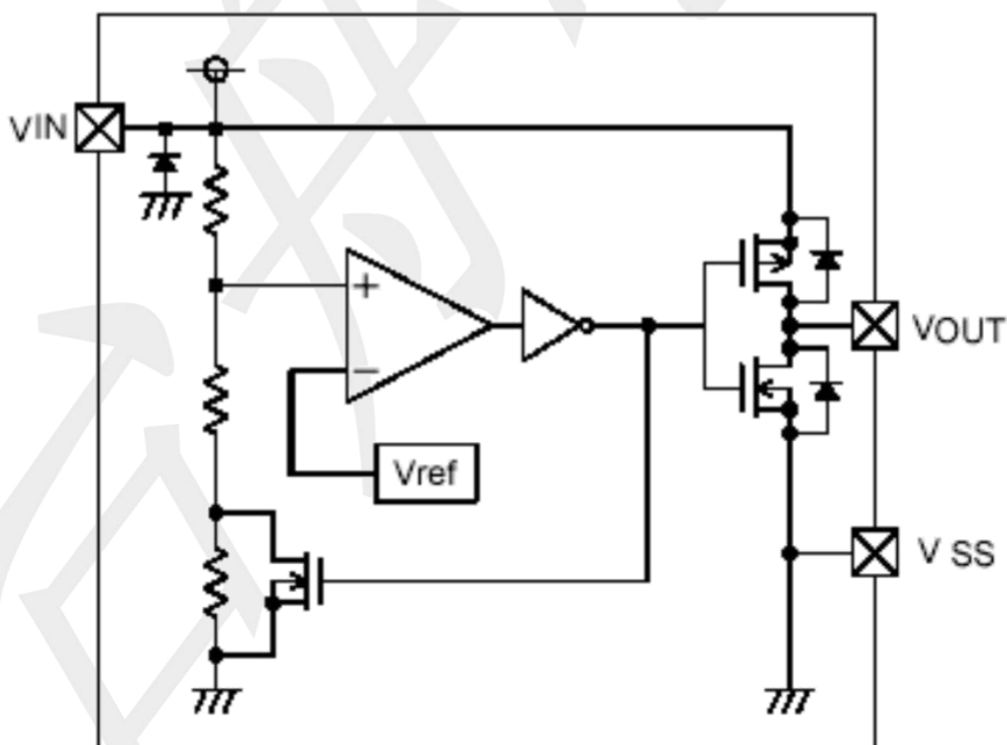
Absolute Maximum Ratings

over operating free-air temperature range (unless otherwise noted)

PARAMETER		MIN	MAX	UNIT
VIN	Continuous input voltage range	-0.3	8	V
VOUT	Output voltage CMOS	-0.3	VIN+0.3	
IOUT	Output pin current	50		mA
PD	Total Power Dissipation $T_C=25^{\circ}\text{C}$	250		mW
θ_{JA}	Package Thermal Resistance	260		$^{\circ}\text{C}/\text{W}$
Temperature	Operating Temperature ,Topr	-25	+85	$^{\circ}\text{C}$
	Storage, Tstg	-40	+125	
TIsolder	Soldering temperature	260,10s		

BLOCK DIAGRAM

CMOS Output

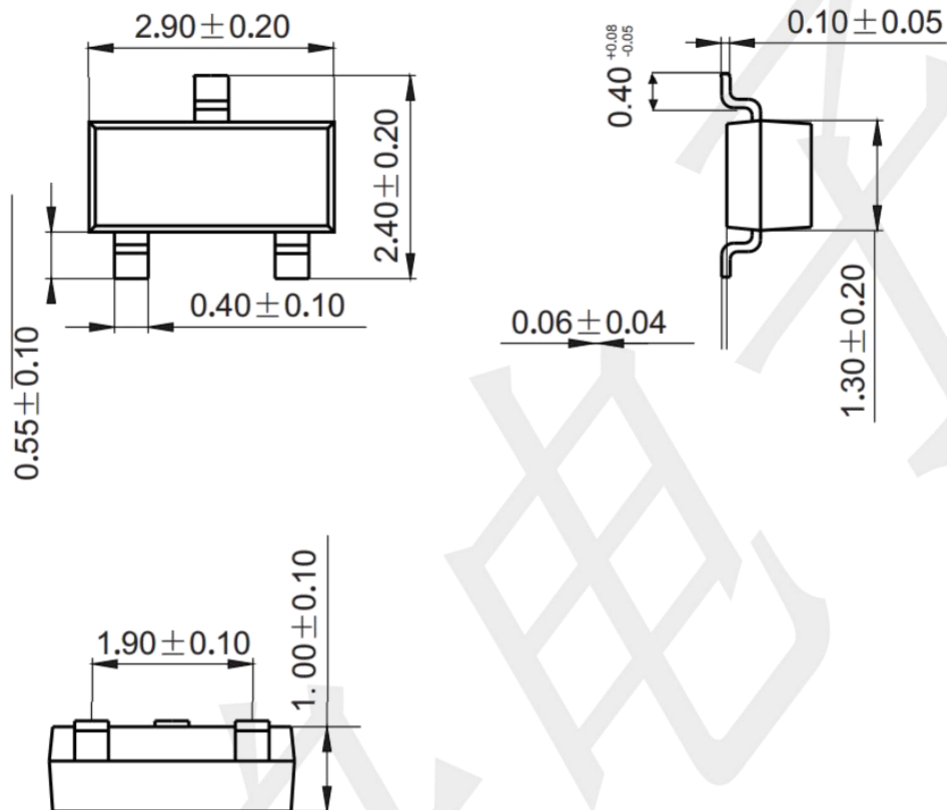


Electrical Characteristics ($V_{DF} = 1.0-5.0V$)

PARAMETER	SYMBOL	TEST Conditions	MIN	TYP	MAX	UNIT
Detection voltage	VDF		*0.98	--	*1.02	V
Hysteresis voltage	VHYS		--	$VDF \times 0.05$	--	V
Input Current	IDD	Vin=1.5V	--	1.0	--	uA
		Vin=2.0V	--	1.0	--	
		Vin=3.0V	--	1.0	--	
		Vin=4.0V	--	1.0	--	
		Vin=5.0V	--	1.0	--	
Working voltage	VDD	VDF=1.0-5.0V	0.8	--	6.5	V
Output current	IOUT	Vin=1.5V	--	2.5	--	mA
		Vin=2.0V	--	7.7	--	
		Vin=3.0V	--	10.1	--	
		Vin=4.0V	--	11.5	--	
		Vin=5.0V	--	13.0	---	
Temperature		-40°C~+85°C	--	±100	--	ppm/ °C

Package Outline Dimensions (unit: mm)

SOT23



Mounting Pad Layout (unit: mm)

