

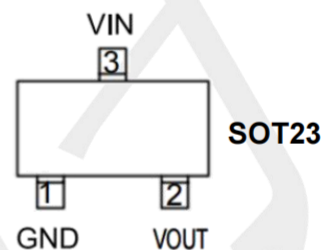
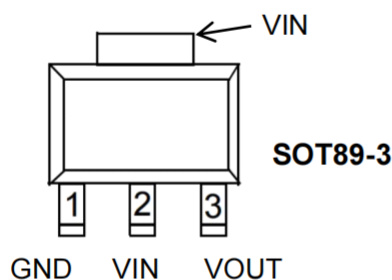
Features

- 3 μ A Current at no Load
- $\pm 2\%$ Output Accuracy
- 300mA Output Current
- Current Limit Protection

Applications

- Portable consumer equipments
- Radio control systems
- Wireless Communication Equipments
- Ultra Low Power Micro controller

PIN CONFIGURATION



Pin Number		Pin Name	Pin Function
SOT89-3	SOT23		
1	1	GND	Ground
2	3	VIN	Input of Supply Voltage
3	2	VOUT	Output of the Regulator

Ordering Information

TP6206PXX2XX

PACKAGE TYPE

T3:SOT89-3

S3:SOT23

$\pm 2\%$ Output Accuracy

OUTPUT VOLTAGE

12: 1.2V

15: 1.5V

18: 1.8V

28: 2.8V

30: 3.0V

33: 3.3V

Example: TP6206P302S3

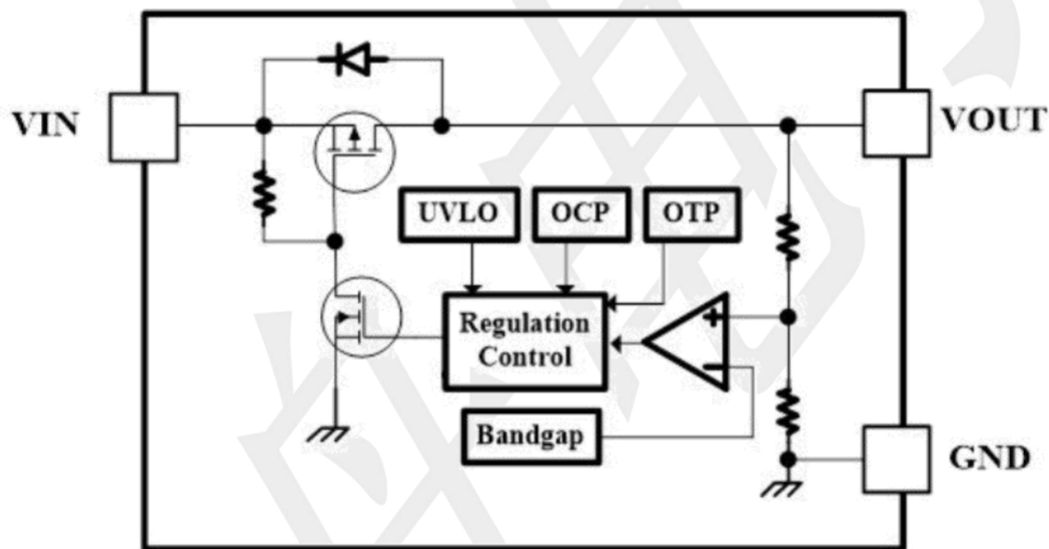
→ 3.0V Version, in SOT23 Package &
Tape & Reel Packing Type

Absolute Maximum Ratings

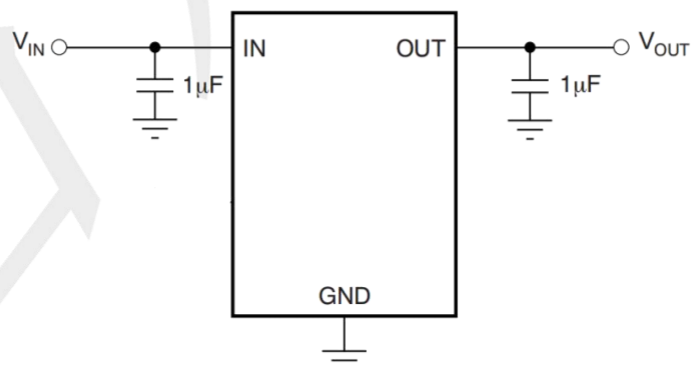
over operating free-air temperature range (unless otherwise noted)

		MIN	MAX	UNIT
VIN	Continuous input voltage range	-0.3	6.5	V
VOUT	Output voltage range	-0.3	VOUT+0.3	
IOUT	Output pin current	Internally limited		mA
Temperature	Operating junction, TJ	-40	125	°C
	Storage, Tstg	-65	150	

BLOCK DIAGRAM



Typical Application Circuit



Electrical Characteristics

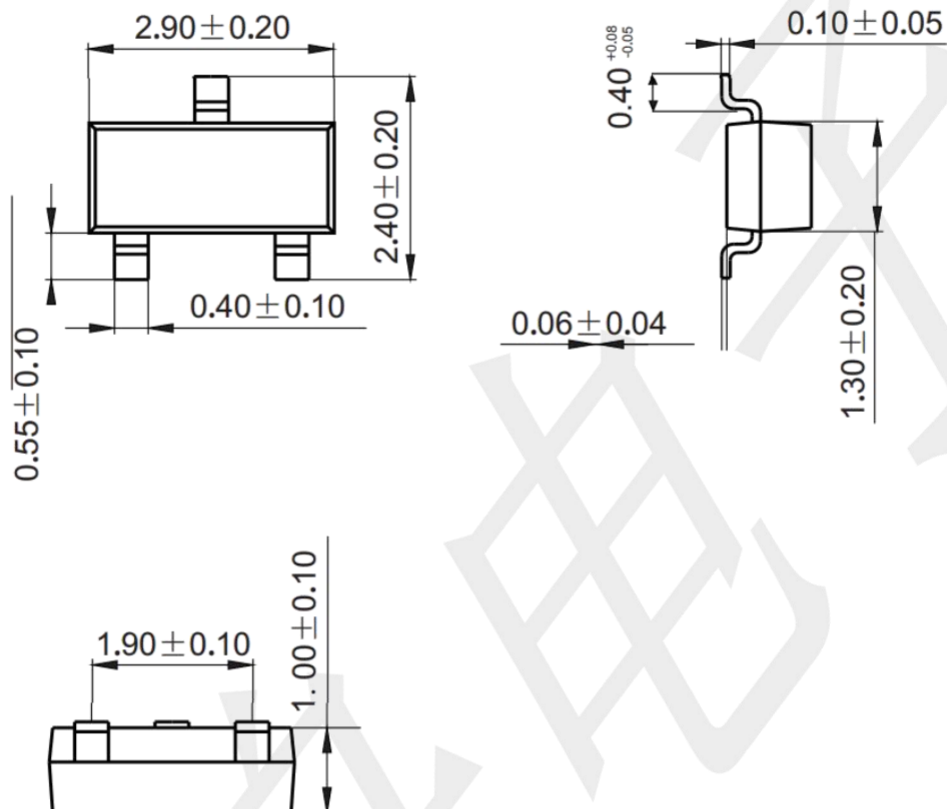
(VIN=6V, TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST Conditions	MIN	TYP	MAX	UNIT
Supply Voltage	VIN		--	--	6	V
Output current	IOUT		0	100	300	mA
DC Output Voltage Accuracy		IOUT = 0.1mA	-2	--	2	%
Dropout Voltage (VIN-VOUT)	IOUT = 50mA	VOUT = 1.2V	--	360	--	mV
		VOUT = 1.5V	--	330	--	
		VOUT = 1.8V	--	300	--	
		VOUT = 2.8V	--	280	--	
		VOUT = 3.0V	--	180	--	
		VOUT = 3.3V	--	160	--	
Ground Current (IOUT = 0mA)	IQ		--	3	--	uA
Line Regulation	ΔLINE	VOUT+1V<VIN<5V IOUT = 10mA	--	0.1	--	%/V
Load Regulation	ΔLOAD	1mA < IOUT < 80mA VIN = VOUT + 1V	--	10	--	mV
Output Current Limit	ILIM	VOUT=0.9×VOUT(NOM)	--	300	--	mA
Power Supply Rejection Ratio	PSRR	VIN=(VOUT+1V) + 1VP-P(AC) IOUT = 10mA, f=1KHz	--	45	--	dB
Package Thermal Resistance θJA (Note 1)	SOT23	Thermal Resistance Junction-toAmbient	--	210	--	°C/W
	SOT89-3		--	100	--	
Total Power Dissipation TC=25°C	SOT23	PDTOT	--	150	--	mW
	SOT89-3		--	500	--	
Thermal shutdown threshold	TSDN		--	150	--	°C
Thermal Shutdown Hysteresis	TSDNHY		--	20	--	°C

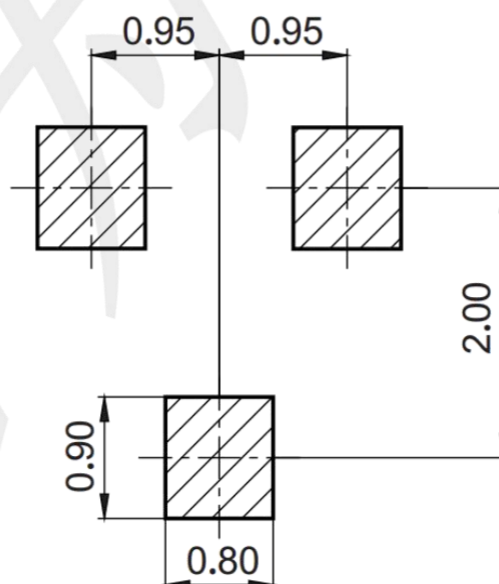
Note: 1. Test condition: For SOT23, the device is mounted on FR-4 substrate PC board, with minimum recommended pad layout.
SOT89-3 devices are mounted on 1"x1" FR-4 substrate PC board, with minimum recommended pad layout

Package Outline Dimensions (unit: mm)

SOT23

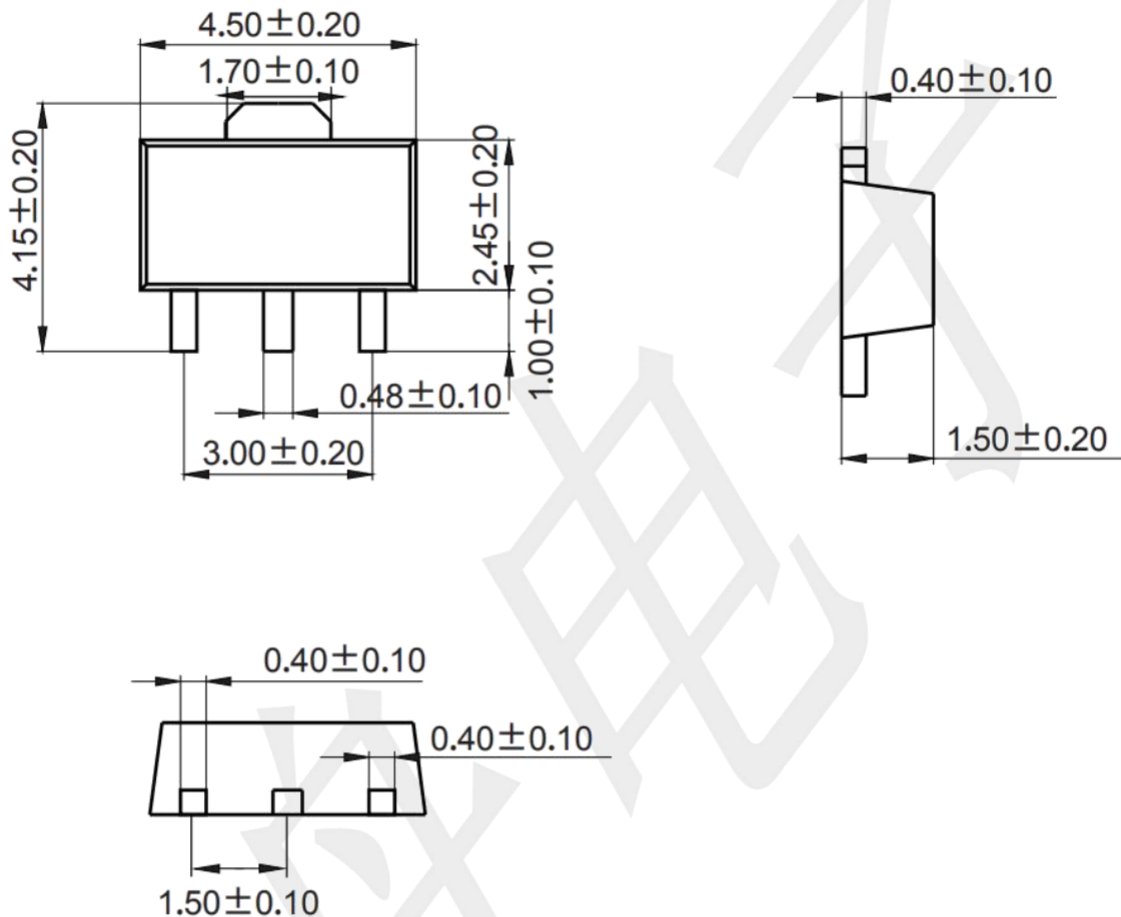


Mounting Pad Layout (unit: mm)



Package Outline Dimensions (unit: mm)

SOT89-3



Mounting Pad Layout (unit: mm)

