

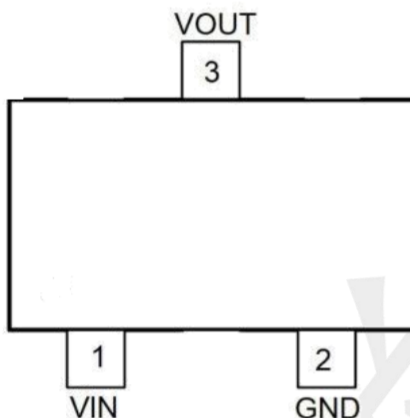
Features

- VIN operating range:2.7 to 30V
- Internal OvP:6.3V
- Internal OCP: 1.1A(typ.)
- Typical Ron: 500mQ@0.7A
- OvP response time:50ns(typ.)
- Startup debounce time:20ms
- Output power on time:20ms
- Output discharge

Applications

- Electronic Cigarette
- SLR Digital Cameras
- Industrial Handheld
- Enterprise Equipment
- GPS
- PC

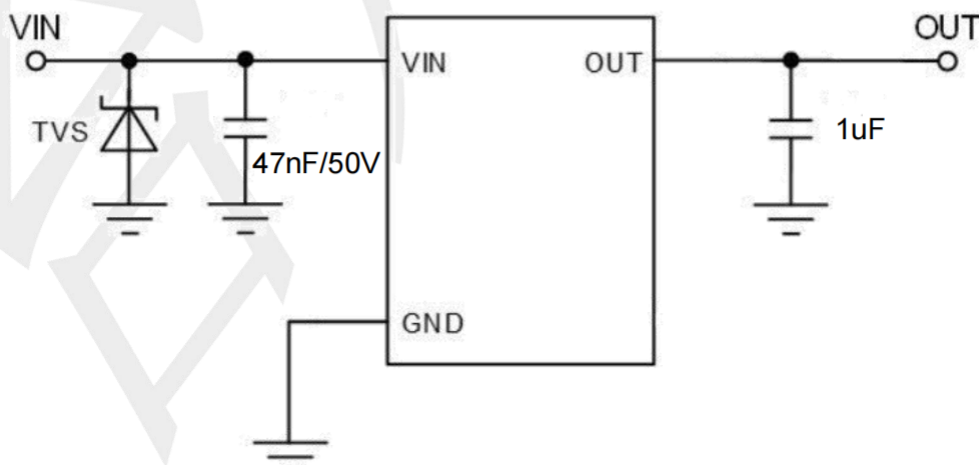
PIN CONFIGURATION



SOT23-3L

Pin Number	Pin Name	Pin Function
SOT23-3L		
1	VIN	Input pin,connect to AC adaptor or VBUS. A 47nF low ESR ceramic capacitor must be connected as close as to this pin.it is recommended to use 50v capacitor or according to application
2	GND	Ground
3	VOUT	Output pin.Connect to load.

Typical Application

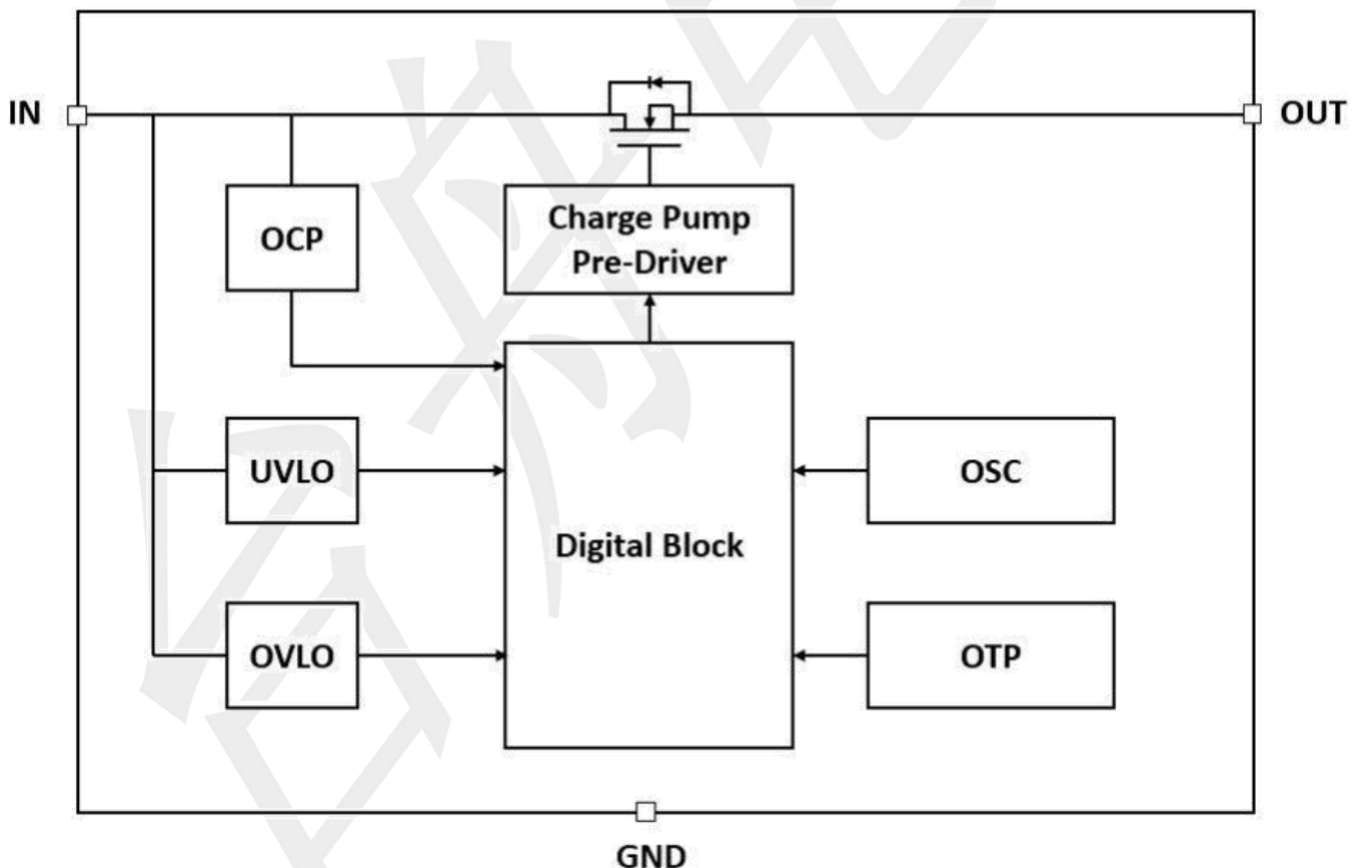


Absolute Maximum Ratings

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

		MIN	MAX	UNIT
VIN	Continuous input voltage range	-0.3	36	V
VOOUT	Output voltage range	-0.3	7.0	
PD	Total Power Dissipation $T_c=25^{\circ}\text{C}$		500	mW
θ_{JA}	Package Thermal Resistance		260	$^{\circ}\text{C/W}$
Temperature	Operating Temperature ,TJ	-40	+150	$^{\circ}\text{C}$
	Storage, Tstg	-65	+150	
TIsolder	Soldering temperature		260,10s	
V(ESD)	Human body model (HBM)		± 2000	V
	Machine Model (MM)		± 200	

BLOCK DIAGRAM

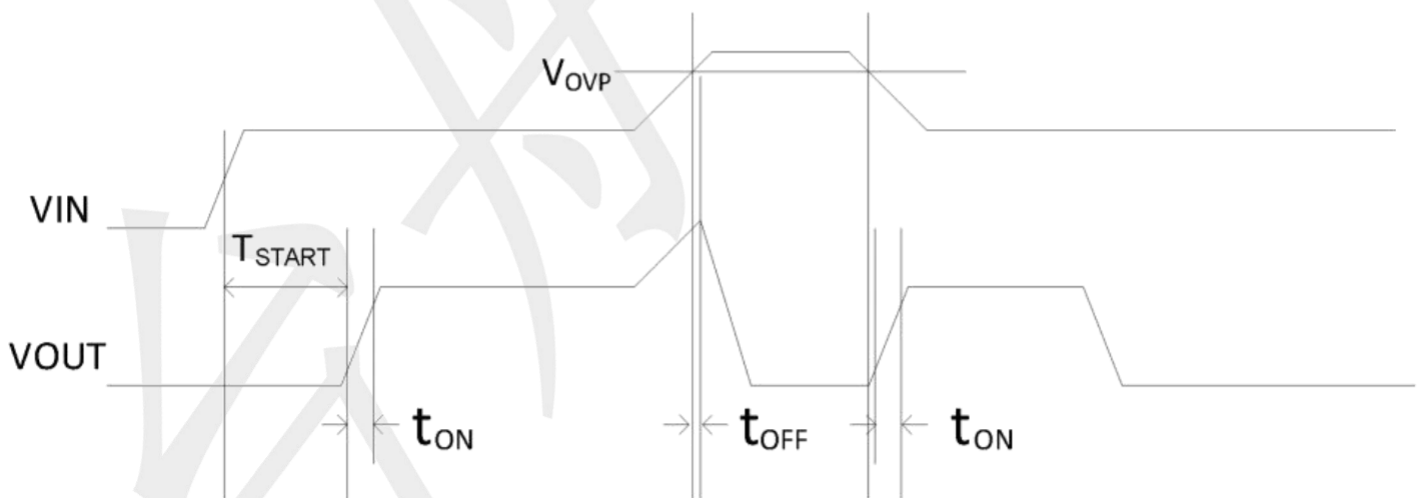


Electrical Characteristics

(VIN=5V, TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST Conditions	MIN	TYP	MAX	UNIT
ViN operating voltage	VIN		2.7	--	30	V
VN operating supply current	Iq	VN= 5V	--	100	150	uA
VIN-to-VOUT ON resistance	RON	VN=5V,IOUT=0.3A	--	480	--	mΩ
		VN=5V,IouT=0.7A	--	500	--	mΩ
Output discharge resistance	RDis		--	3	--	KΩ
ViN undervoltage lockout	VUVLO_R	VN rising	--	2.5	--	V
	VUNLO_F	Vx falling	--	2.3	--	V
Output power on time	TON	VN=0->5Vto output ON	--	20	--	ms
OvP active time	TOVP	VN=5->10V with rising 1V/20ns	--	50	--	ns
OvP recovery time	TON_OVP	VN= 10->5V to output ON	--	20	--	ms
OCP threshold	IocP		--	1.1	--	A
OTP threshold	TOTP		--	165	--	°C
oTp threshold hysteresis	TOTP_HYS		--	40	--	°C

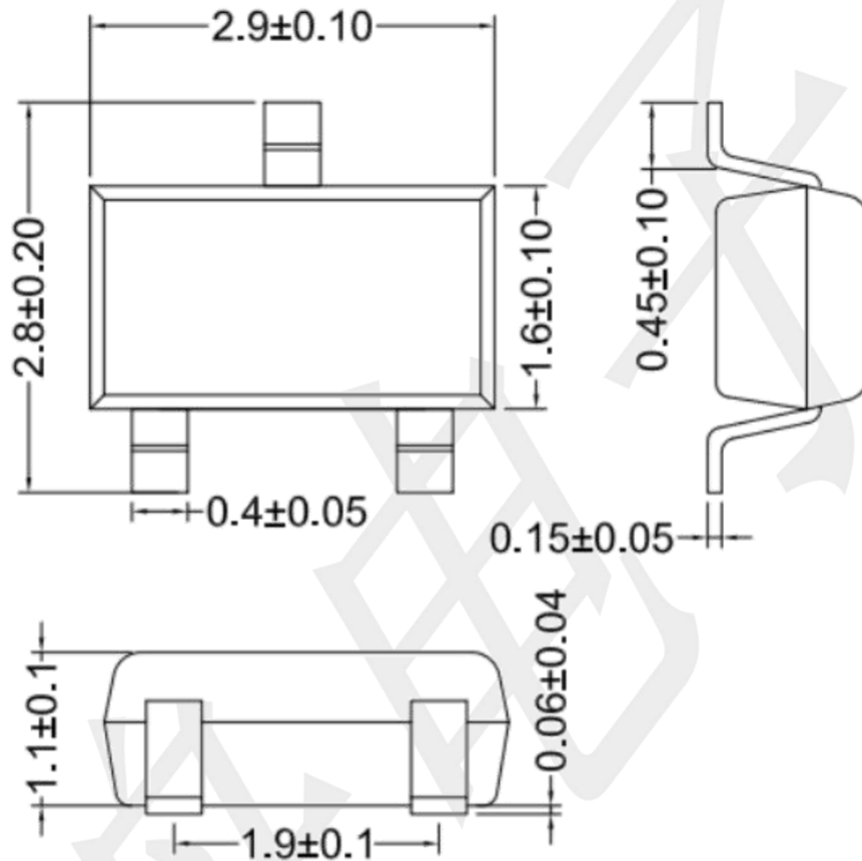
OVP



Internal time setting

Package Outline Dimensions (unit: mm)

SOT23-3L



Mounting Pad Layout (unit: mm)

