



### Features

- Distribution Voltages: 2.5V to 5.5V
- Over Temperature Shutdown
- Reverse Blocking (No Body Diode)
- EN high level enable
- Continuous Switching Current Of is 1A

### Application range :

- USB port/hub, laptop, desktop
- HD digital TV
- Set-top box
- Over temperature protection function

Pin Name	Pin Number	Pin Description
VOUT	1	Output pin
GND	2	Ground pin
FLG	3	Fault Flag
EN	4	Action, highly effective
VIN	5	Input pin

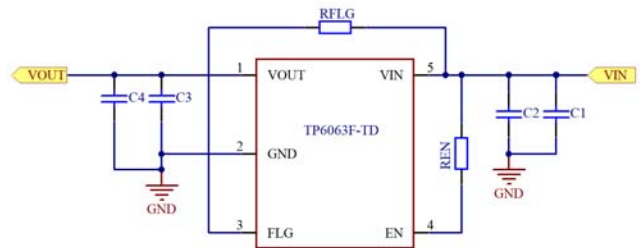
### Package: SOT23-5



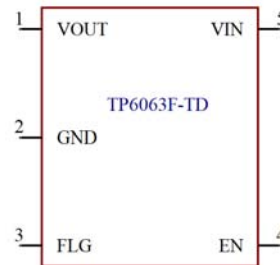
### General Description:

The TP6063F-TD is an ultra-low RDS(ON) switch with current limitation function to protect the power source from over current and short circuit conditions.

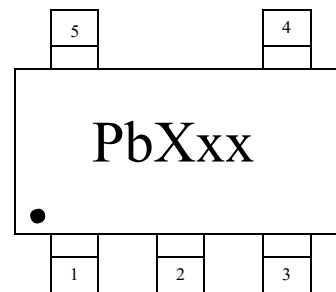
### Typical application circuit:



### Top view



### Marking Codes



#### Note:

- (1) "Pb" is Product series.
- (2) "X" is the Years.
- (3) "x" is the Weeks.
- (4) "x" is the internal code.



## ABSOLUTE MAXIMUM RATINGS

		VALUE		UNIT
		MIN	MAX	
Voltage range on IN, OUT, EN , FLT		-0.3	6	V
Voltage range from IN to OUT			6	V
Maximum junction temperature, T <sub>J</sub>		Internally Limited		
Electrostatic Discharge	HBM	2		kV
	CDM	500		V
	IEC 61000-4-2, Contact / Air	8	15	kV

## Electrical Characteristics

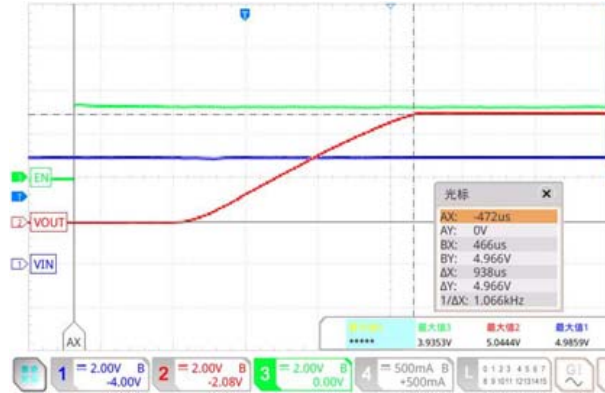
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Input voltage range	VIN				5.5	V
Shutdown input current	ISHDN	EN pull down, output no load			0.5	uA
Quiescent supply current	IQ	EN pull up, output no load		34		uA
FET RON	RDS(ON)	@1A			110	mR
Current limit	ILIM		1.1	1.3	1.5	A
EN logic-low voltage	VIL	No load		1.4		V
EN logic-High voltage	VIH	No load	2			V
IN UVLO Threshold	VIN,UVLO	Shut down when less than 1.8				V
IN UVLO Hysteresis	VIN,HYS	Turn on when greater than 1.8				V
Turn-ON time	TON			938		us
Turn-OFF-time	TOFF			70		us
Thermal Shutdown Temperature	TSD			125		°C
Thermal Shutdown Hysteresis				20		°C



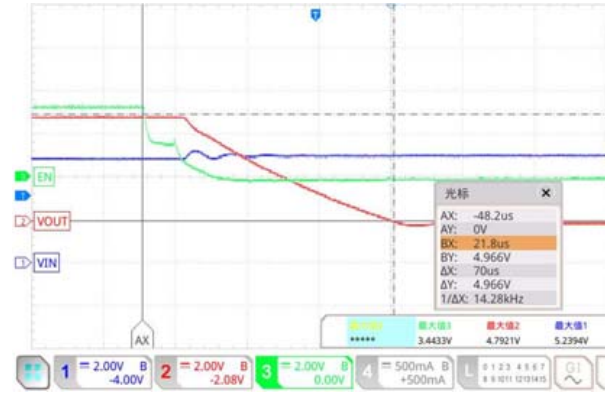
### Typical Operating Characteristics

(Test Conditions: VIN=5V, REN=100K, RFLG=100K, C1=C3=0.1uF, C2=C4=10uF)

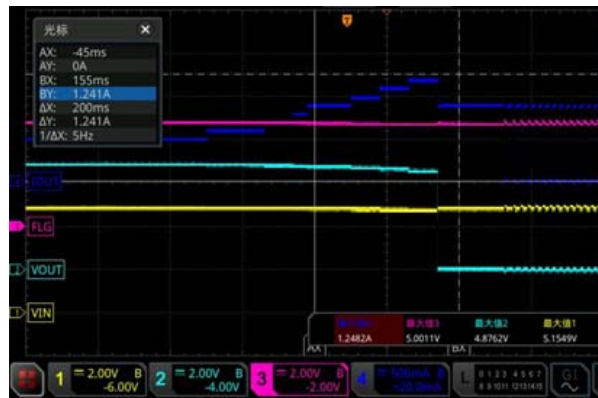
Turn On Response (Typical: 938us)



Turn off Response (Typical: 70us)



Output overcurrent (Typical: 1.24A)



Output short circuit protection



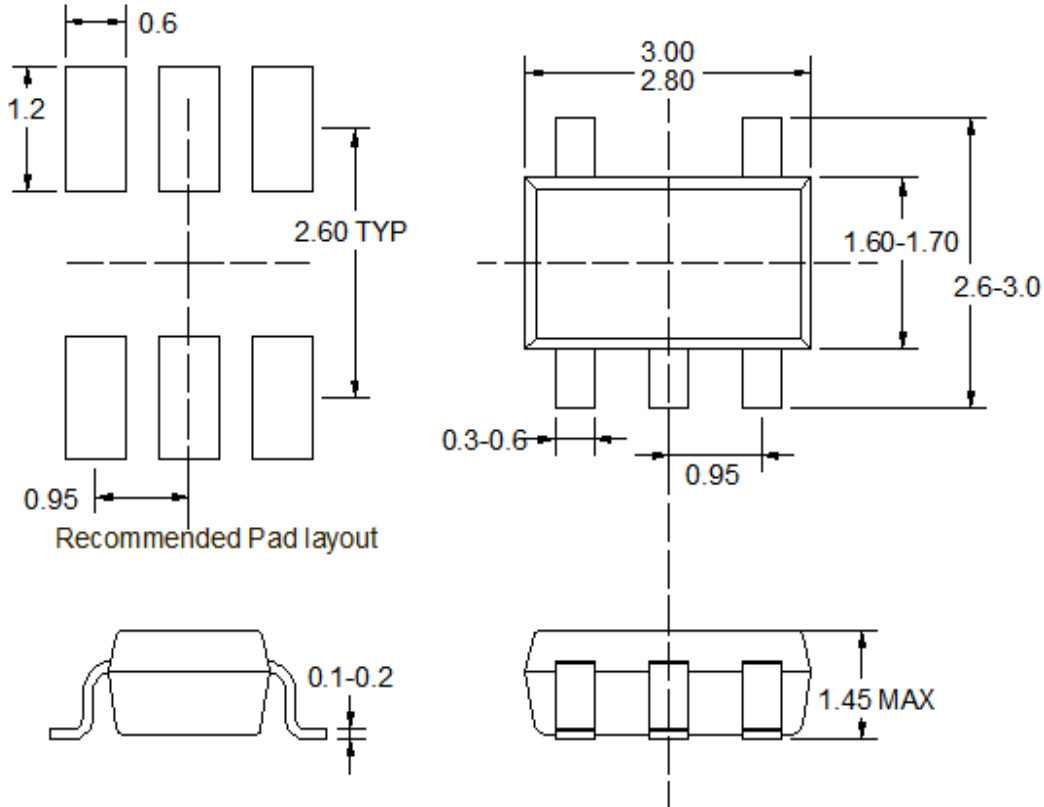
Over temperature protection



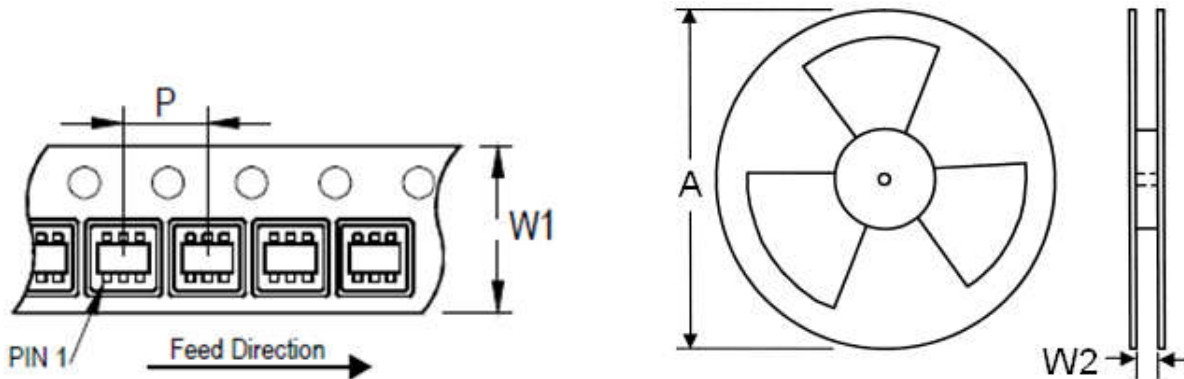


## Package Information

### SOT23-5



## Carrier Dimensions



Tape Size (W1) mm	Pocket Pitch (P) mm	Reel Size (A)		Reel Width (W2) mm	Empty Cavity Length mm	Units per Reel
		in	mm			
8	4	7	180	8.4	300~1000	3,000