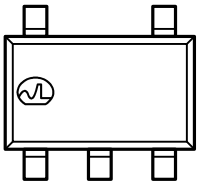
SOT23-5L		
1	CE	
2	GND	ضر
3	LX	
4	VIN	
5	FB	

■

SOT23-5L



SOT23-5L
(TOP VIEW)

ج

	ج
3	XT3401

	F	FB=0.1V

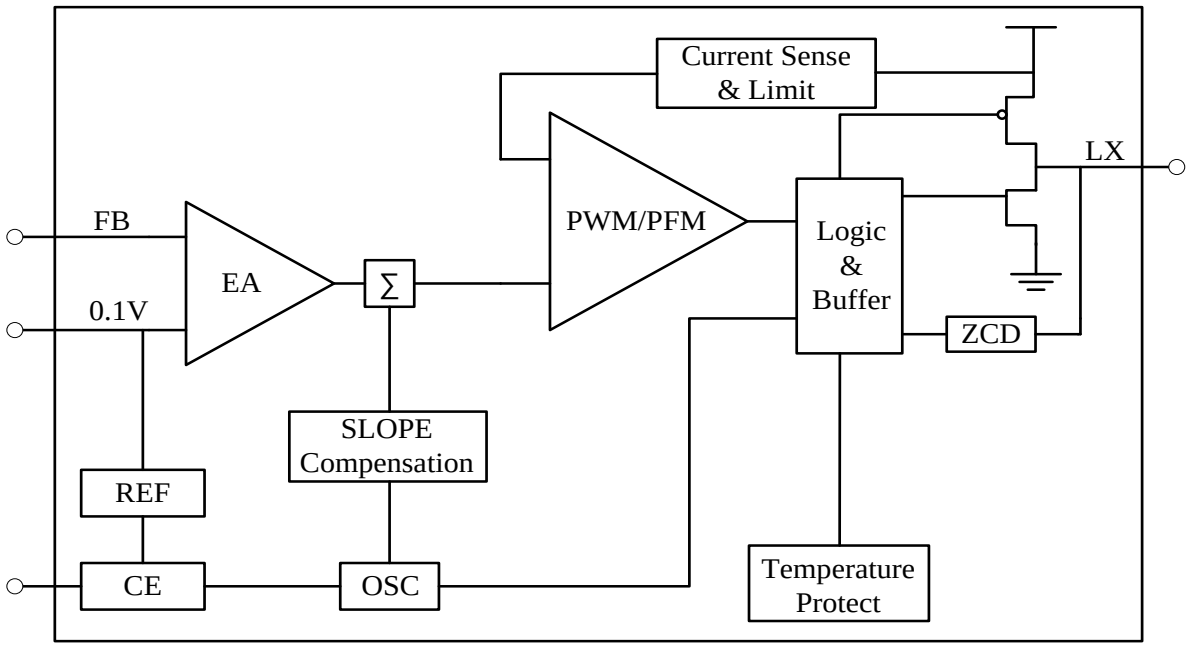
	M	SOT23-5L

0-9 A-Z 0-9 A-Z G I J O Q W

■

	V_{IN}	-0.3 7.5	V
	V_{OUT}	-0.3 7.5	
	V_{LX}	-0.3 VIN + 0.3	
CE	Vce	-0.3 VIN + 0.3	V
LX	I_{LX}	3	A
SOT23-5L	Pd	250	mW
	Topr	-40 85	
	Tstg	-55 125	

■



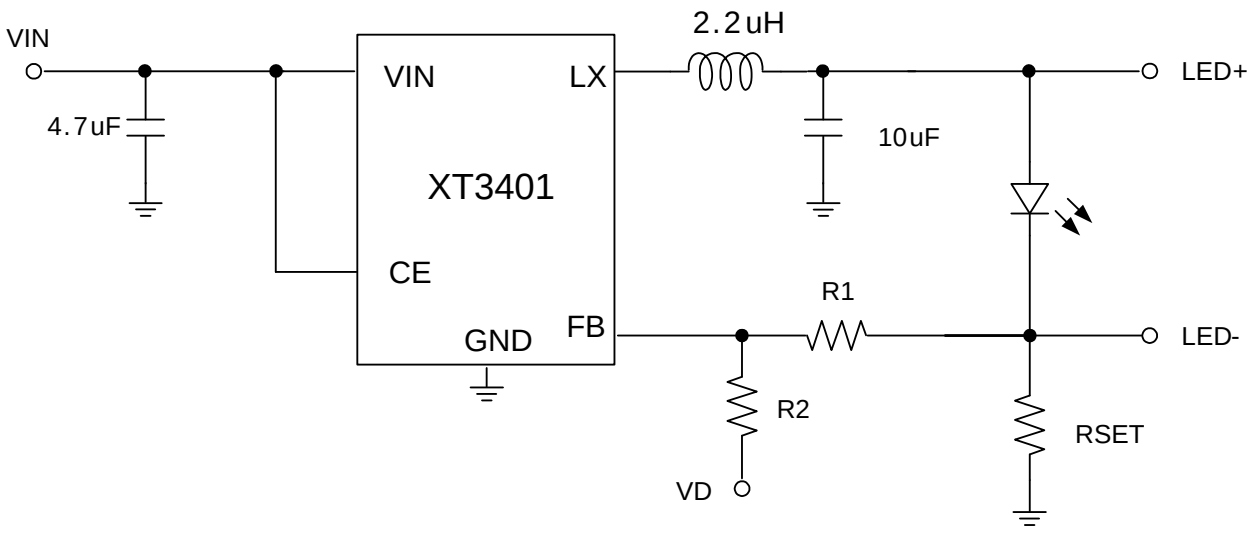
■

VIN=5V ,C_{IN}=4.7μF ,C_{OUT}=10μF ,L=2.2μH (Ta=25)

	VIN	-	2.5	-	7.2	V
FB	VFB	Ta=25	96	100	106	mV
	ISTB	VCE=0V VIN=5V	0	-	1	uA
	IQ	VFB=110%	-	50	-	uA
	IACT					

■ FB

XT3401 ضي FB يد



1 ILED

$$ILED = \frac{1}{RSET} \times \left[0.1 - \frac{R1}{R2} \times (VD - 0.1)\right] \quad 1$$

VD

VD>>0.1V ILED 0

0.1=(VD-0.1)*R1/R2 2

VD , VD=1.8V R2/R1=17

VD=0 ILED

ILEDmax=1/RSET × (0.1 + 0.1*R1/R2) 3

ILEDmax 2 غ 3 RSET

VD=1.8V ILEDmax=500mA RSET=0.22ohm

IO غد R1=10K R2=170K

PWM

ضي VD يد PWM

RS غ CS كج PWM VD VD ضي يد R2

VD= (VH–VL) × D D PWM VH غ VL PWM PWM CS

IO VH=VIO 2.8V VL=0 R2/R1=27 R1

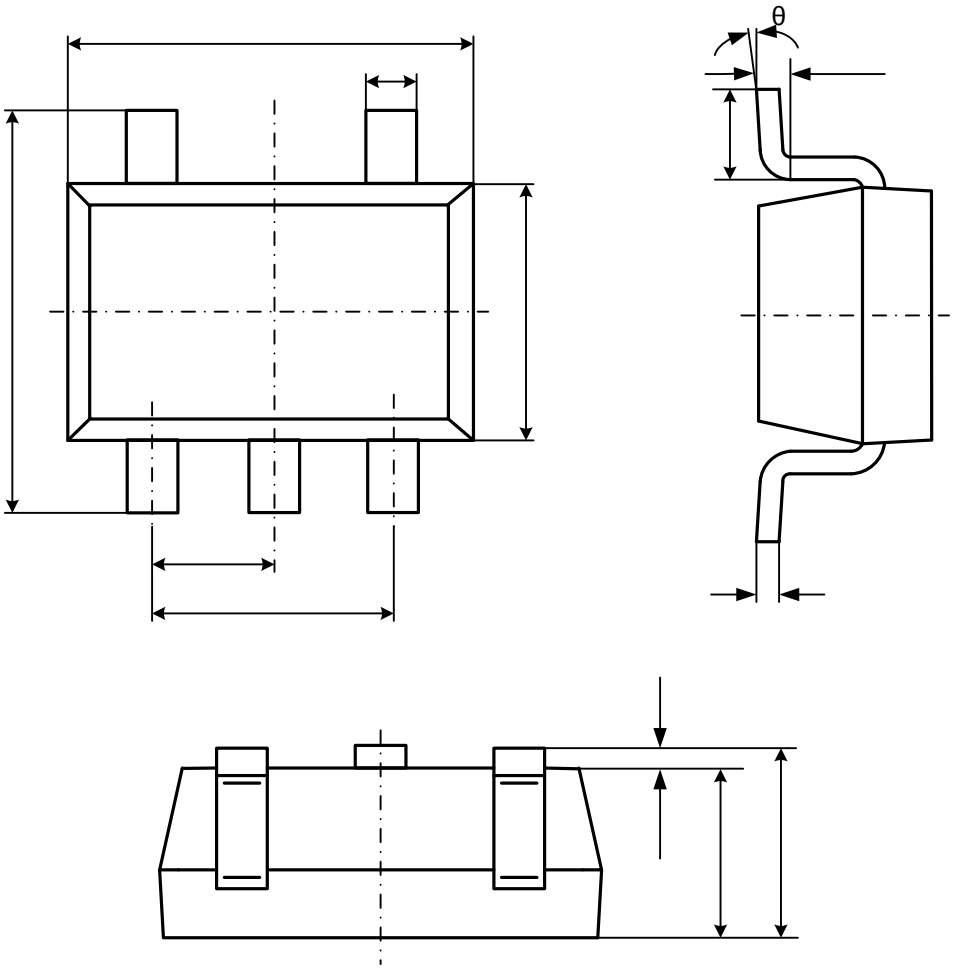
10K R2=270K

PWM 100KHz 1% RS غ CS كج

(f=1/(2π RC) CS=1uF RS=3K f=17.6Hz<<1KHz.

■

SOT23-5L



Symbol	Min	Max	Min	Max