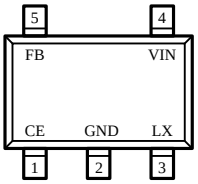
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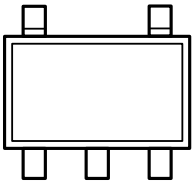

SOT23-5L
(TOP VIEW)

■

| | | |
|---|---|---|
| 1 | CE | |
| 2 | GND | |
| 3 | LX | |
| 4 | VIN | |
| 5 | FB | |

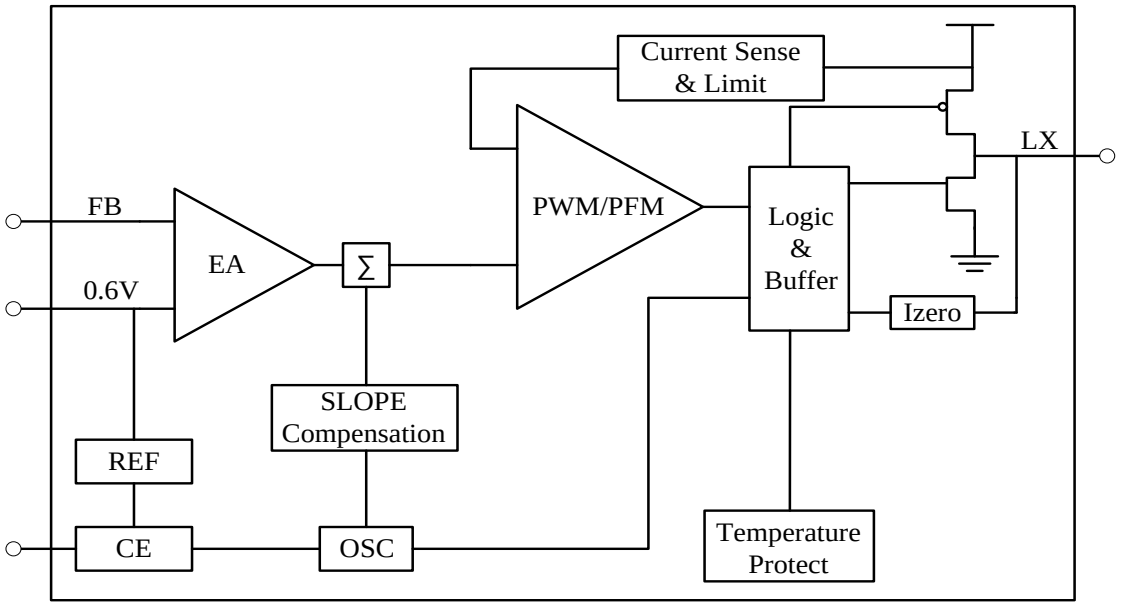
■

SOT23-5L



| | |
|---|---|
| AD5 | 1.5A |
| X | |

■



■

| | | | |
|---|---|---|---|
| | VIN | -0.3 6.5 | V |
| | VFB | -0.3 6.5 | |
| | VLX | -0.3 VIN + 0.3 | |
| CE | VCE | -0.3 VIN + 0.3 | V |
| LX | ILX | ±2 | A |
| SOT-23-5L | Pd | 250 | mW |
| | Topr | -40 85 | |
| | Tstg | -55 125 | |

■

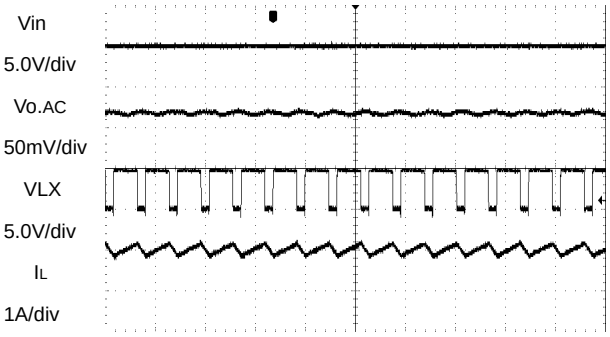
CIN=10uF, COUT=10uF, L=2.2uH (Ta=25 )

| | | | | | | |
|---|---|---|---|---|---|---|
| | VIN | - | 2.5 | - | 6.2 | V |
| | UVLO | - | - | 2.4 | - | V |
| | UVLO_HYS | - | - | 500 | - | mV |
| | OVP | - | - | 6.2 | - | V |
| | OVP_HYS | - | - | 250 | - | mV |
| FB | VFB | Ta=25 | 0.588 | 0.6 | 0.612 | V |
| | ISTB | VCE=0V, VIN=5V | 0 | - | 1 | uA |
| | IQ | VFB=110%, ILOAD=0 | - | 40 | - | uA |
| | IACT | VFB=90%, ILOAD=0 | - | 150 | 300 | uA |
| | ILIM | VFB=90%, VIN=5V | 1.7 | - | | A |
| | VOUT | ILOAD=10mA to 1.0A | - | 0.5 | - | % |
| | $\frac{VOUT}{VIN \quad VOUT}$ | VIN=2.5V to 6V | - | 0.04 | 0.4 | % |
| PFM | ILOAD | VIN=3.6V, VOUT=1.8V | - | 30 | - | mA |
| | FOSC | VOUT=100% | - | 1.5 | - | MHz |
| | DMAX | - | 100 | - | - | % |
| _P | RDSON_P | ISW=100mA | - | 0.3 | - | |
| _N | RDSON_N | ISW= 100mA | - | 0.2 | - | |
| SW | ILEAK_SW | VCE=0V, IN=5V | - | ±0.01 | ±1 | uA |
| CE | VCEH | VIN=5V | 1.2 | - | - | V |
| CE | VCEL | VIN=5V | - | - | 0.7 | V |
| | I_OS | VFB<0.2V | - | 0.2 | - | A |
| | TSHD | - | - | 160 | - | |
| | T_HYS | - | - | 25 | - | |

■

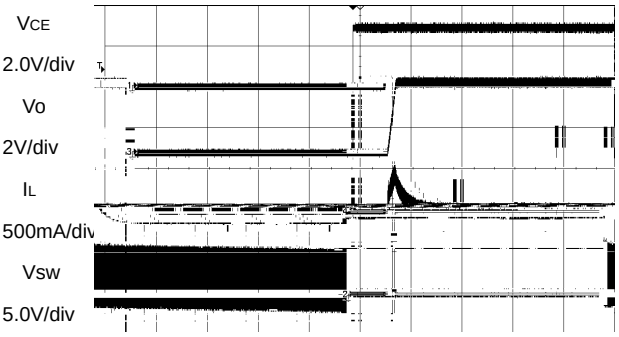
1

VIN=5.0V, VOUT=3.3V, IL=1.0A




2 CE

VIN=5.0V, VOUT=3.3V, IL=1.0A



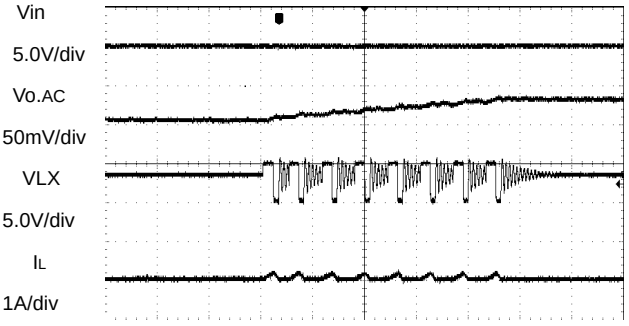

3 CE

VIN=5.0V, VOUT=3.3V, IL=1.0A



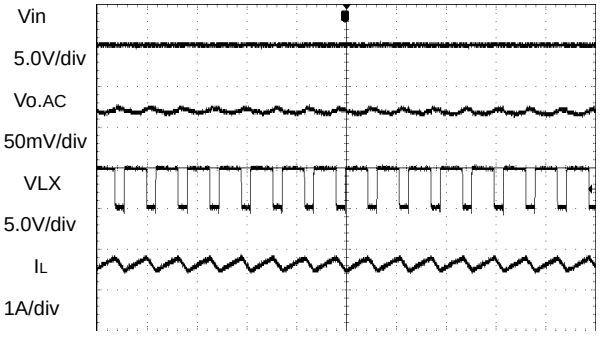

4

VIN=5.0V, VOUT=3.3V, IL=1mA



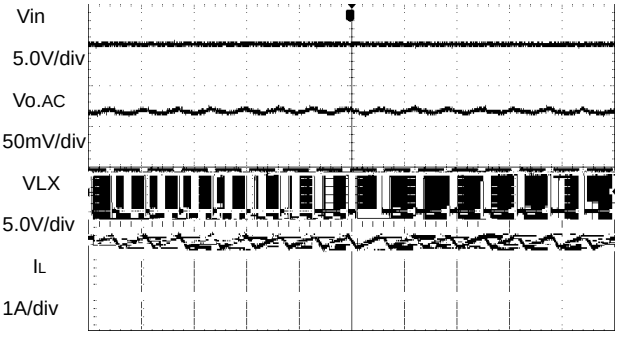

5

VIN=5.0V, VOUT=3.3V, IL=0.6A

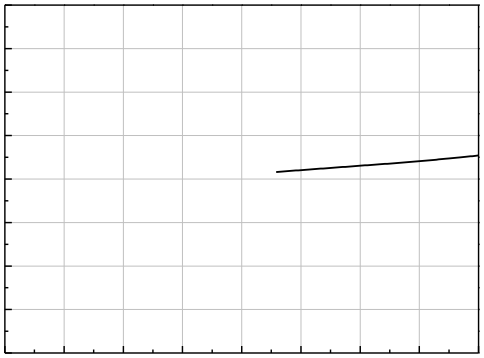



6

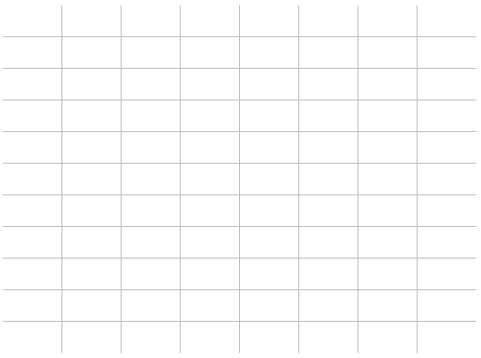
VIN=5.0V, VOUT=3.3V, IL=1.2A



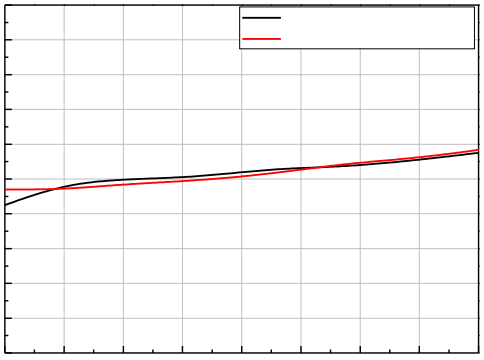
7



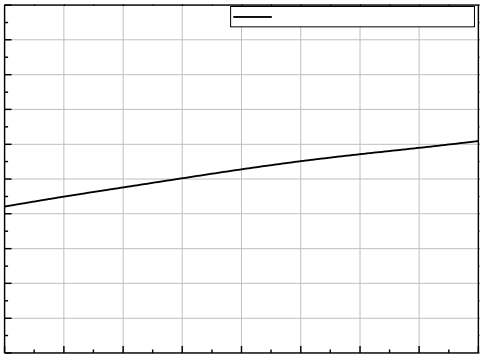
8



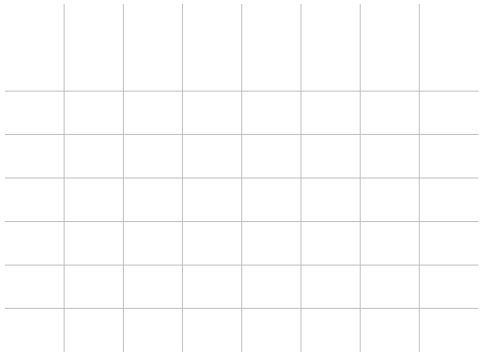
9



10



11

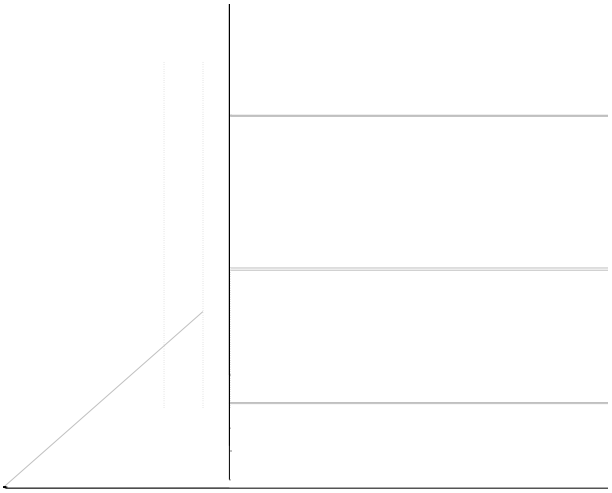


12 @ VOUT=3.3V

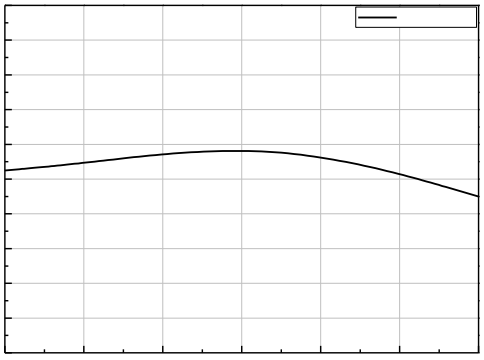
13 @ VOUT=1.8V



14 @ VOUT=1.2V



15 Vs.



16 @ VOUT=3.3V

■

**PFM**

XT3415 XT3415 PFM PFM
PWM/PFM CMOS DC/DC
2.5V ~ 6.2 V 0.6V
1.5A
XT3415 CE 0.7V XT3415
PMOSFET NMOSFET 1uA
OSC FB
EA XT3415
PWM

FB PWM
XT3415 160°C
135°C

■

■

C1

## ■ PCB

PCB

1 VIN SW GND

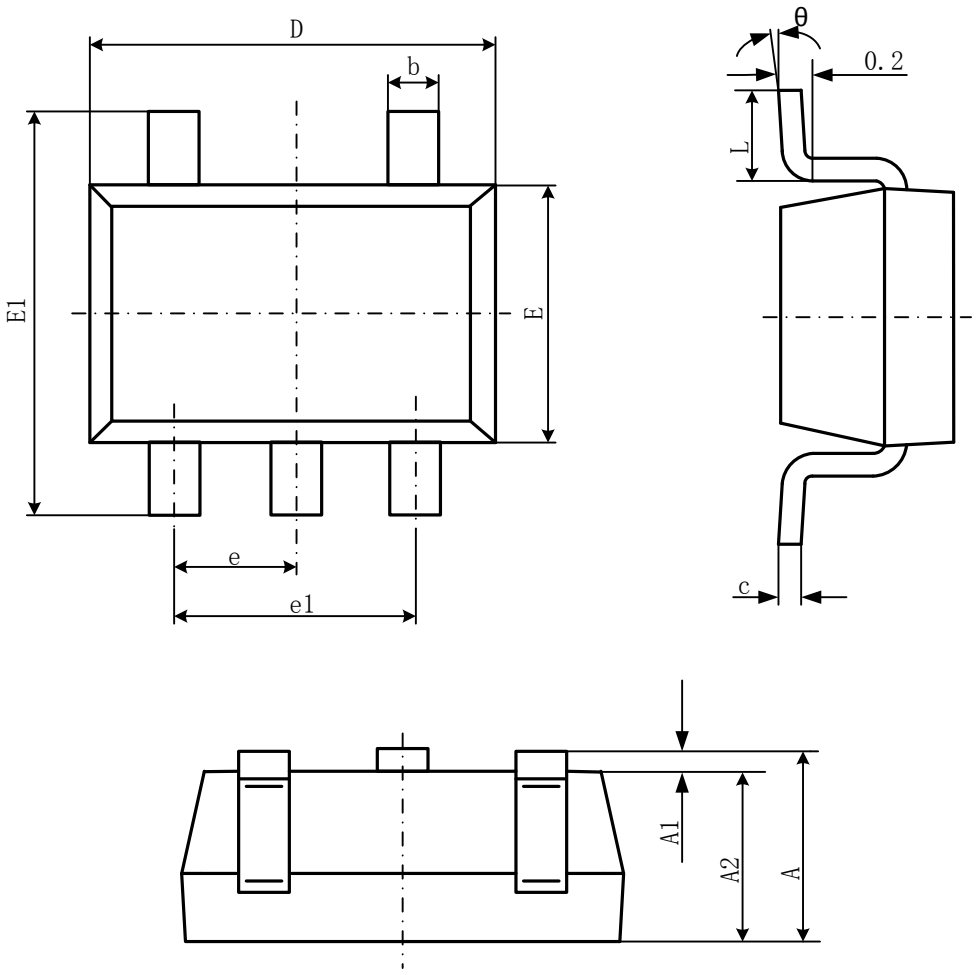
2

3 VOUT

4 PCB

■

**SOT23-5L**




Symbol