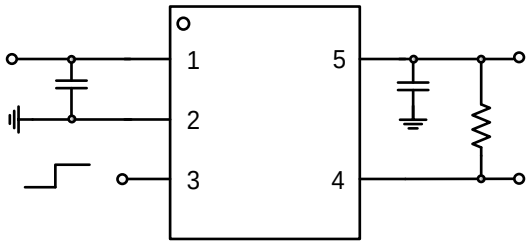
3V-28V Vin, 300mA, 2.4uA I_Q, Low-Dropout Regulator with PG Feature



(1)

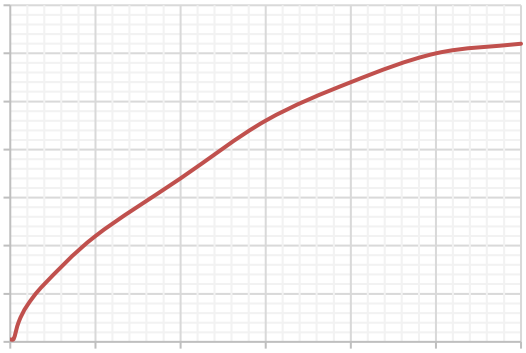
(2)

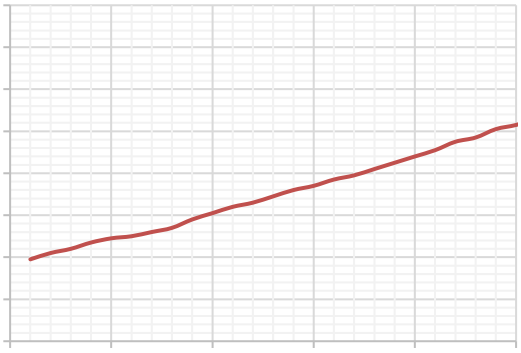
(3)

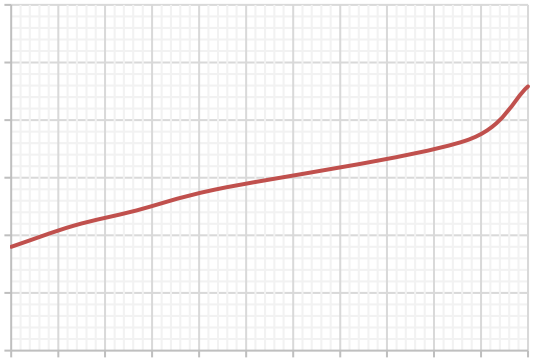
(1)

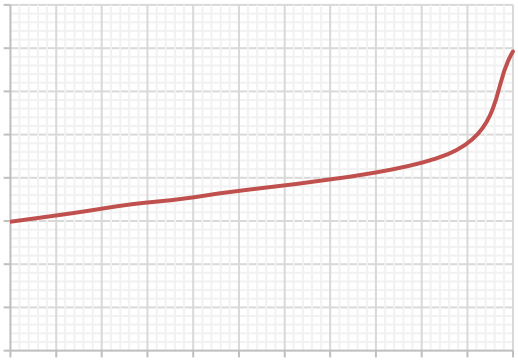
(2)

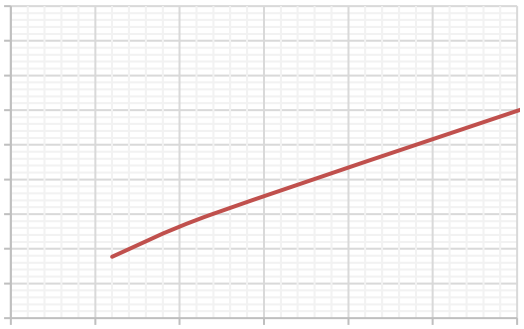
(3)

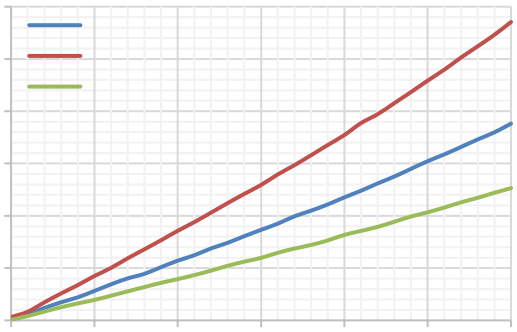


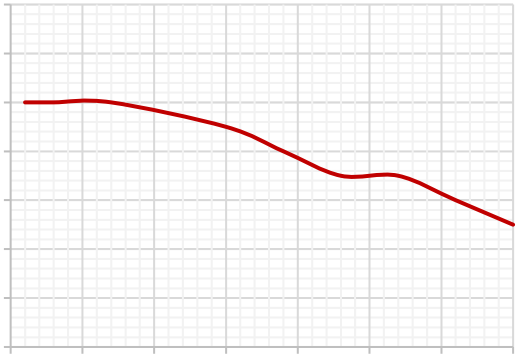


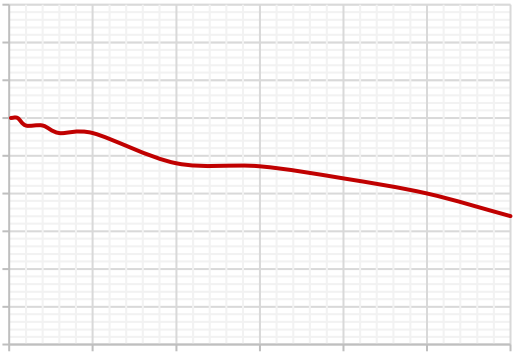


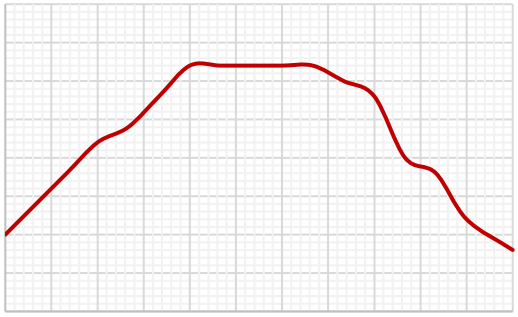


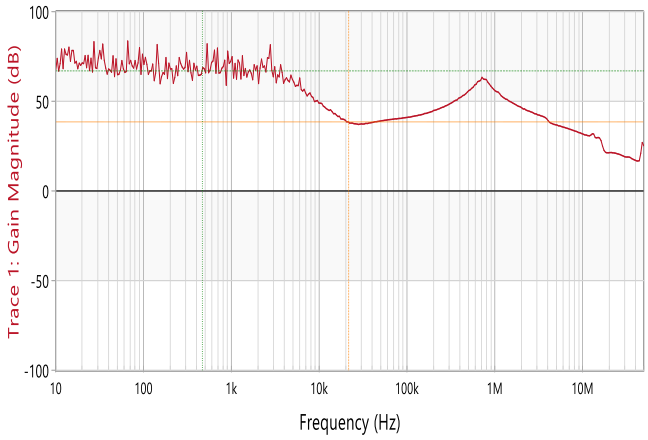


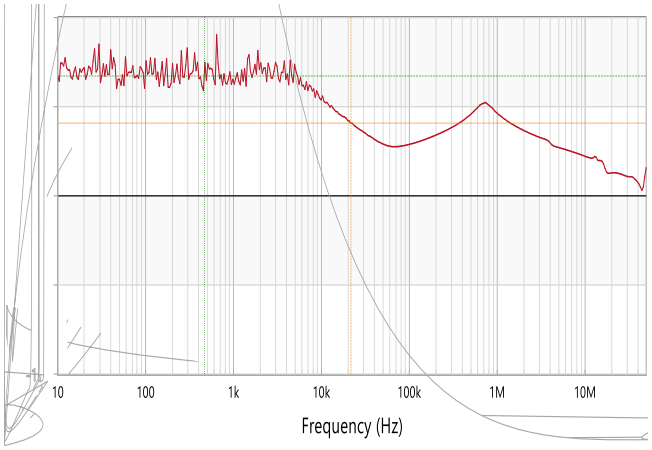


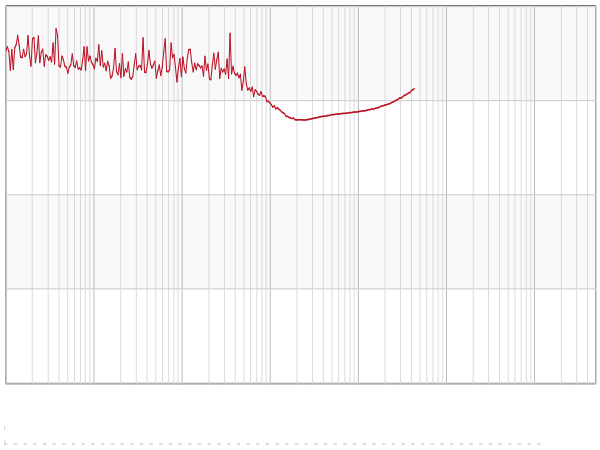


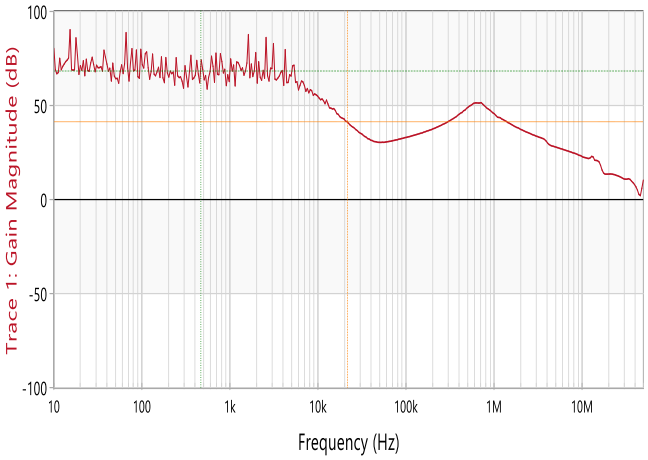


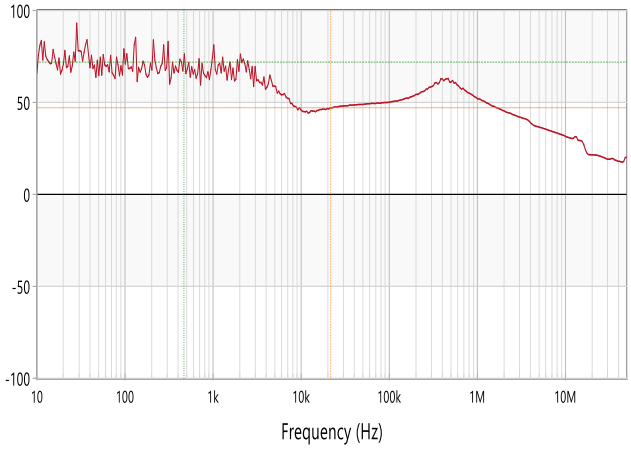


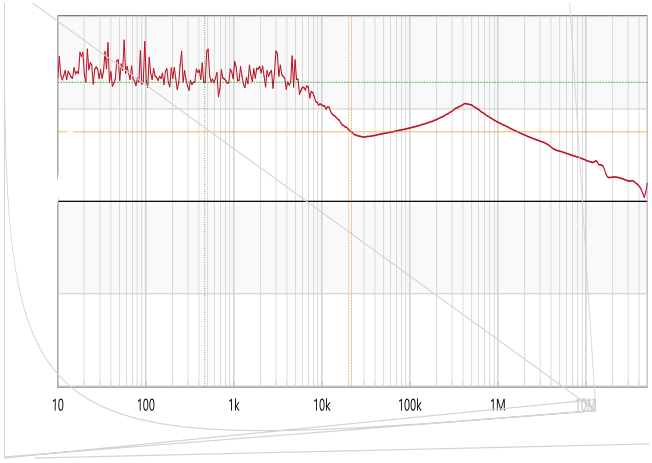

Trace 1: Gain Magnitude (dB)
100
50
0
-50
-100
10
100
1k
10k
100k
1M
10M
Frequency (Hz)

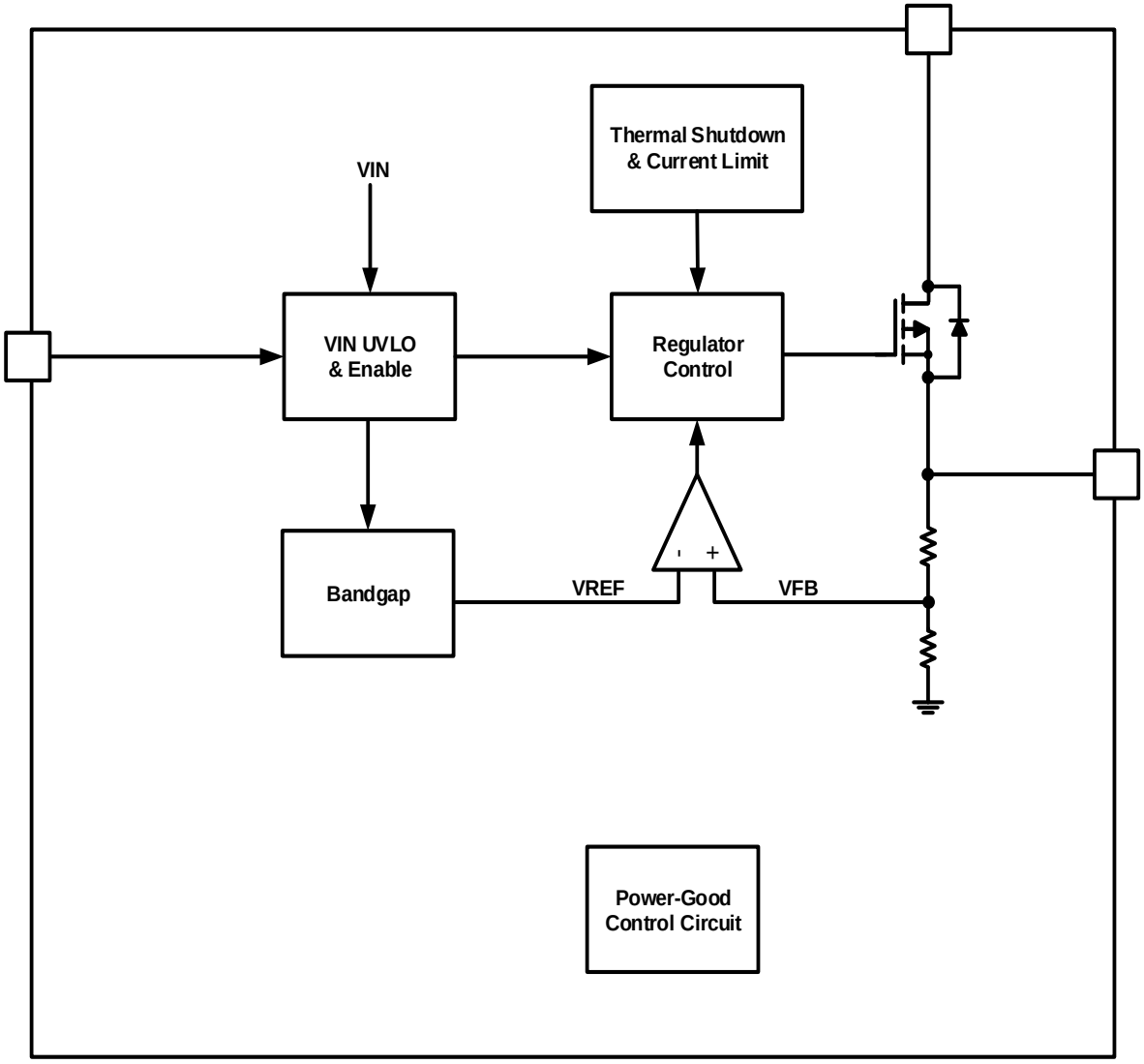

10
100
1k
10k
100k
1M
10M
Frequency (Hz)

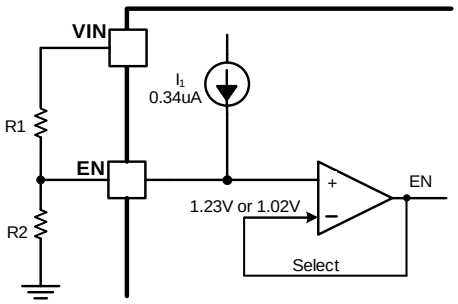


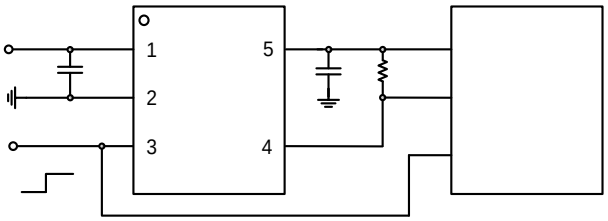

Trace 1: Gain Magnitude (dB)
100
50
0
-50
-100
10
100
1k
10k
100k
1M
10M
Frequency (Hz)

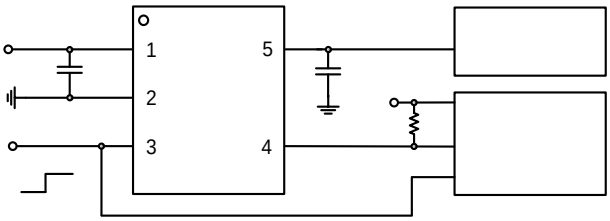

100
50
0
-50
-100
10
100
1k
10k
100k
1M
10M
Frequency (Hz)

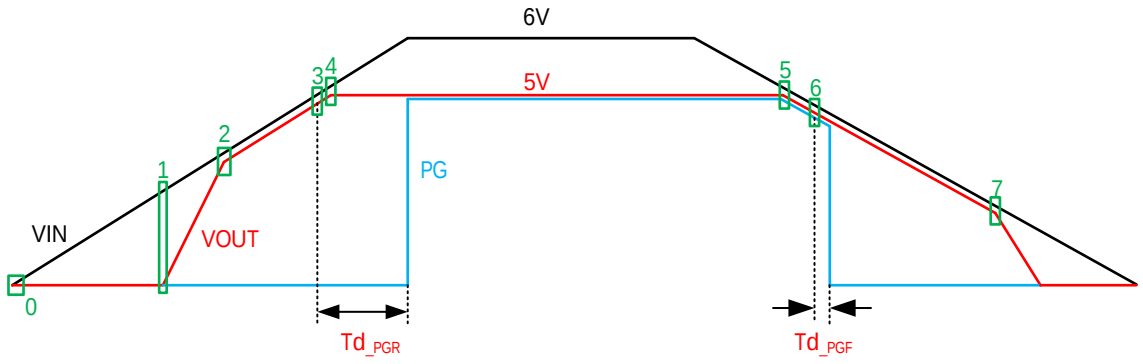

10
100
1k
10k
100k
1M

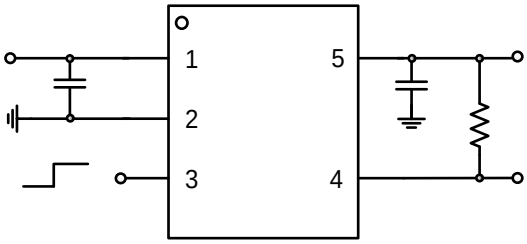

Thermal Shutdown
& Current Limit
VIN
VIN UVLO
& Enable
Regulator
Control
Bandgap
VREF
VFB
Power-Good
Control Circuit

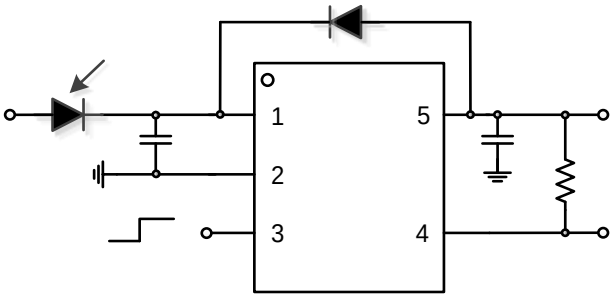

VIN
I1
0.34uA
R1
EN
+
EN
1.23V or 1.02V
−
R2
Select

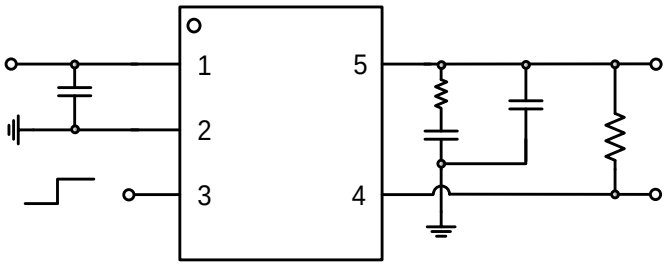

1
5
2
3
4

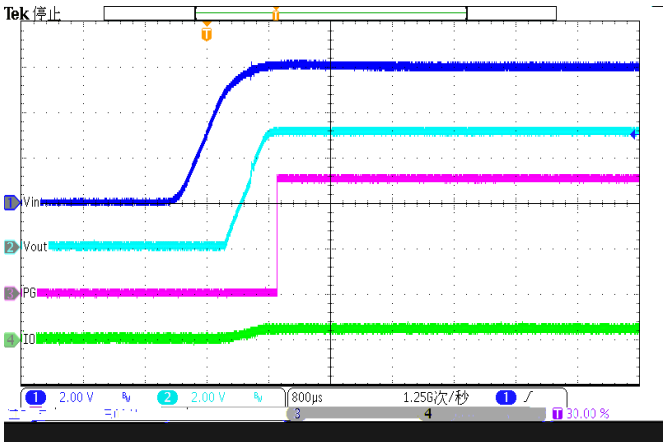

1
5
2
3
4

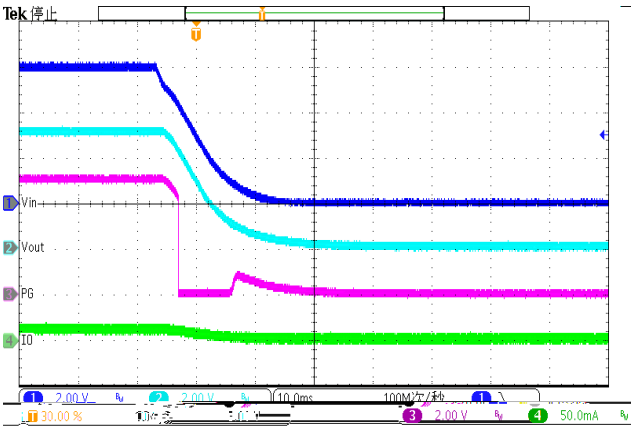

6V
5V
VIN
VOUT
PG
0
1
2
3
4
5
6
7
Td_PGR
Td_PGF

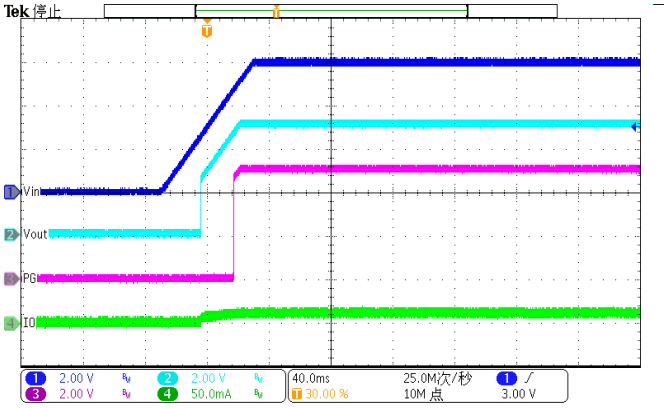

1
2
3
5
4

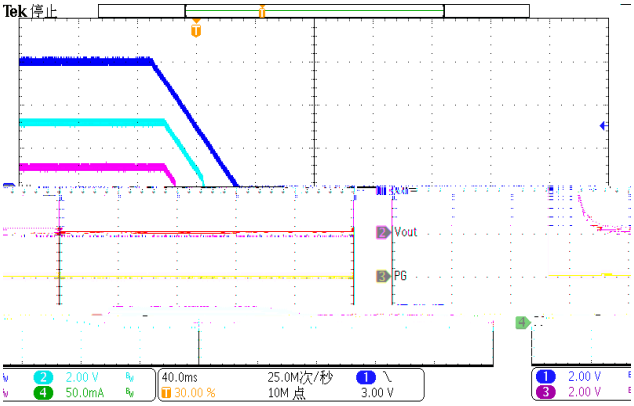

1
2
3
5
4

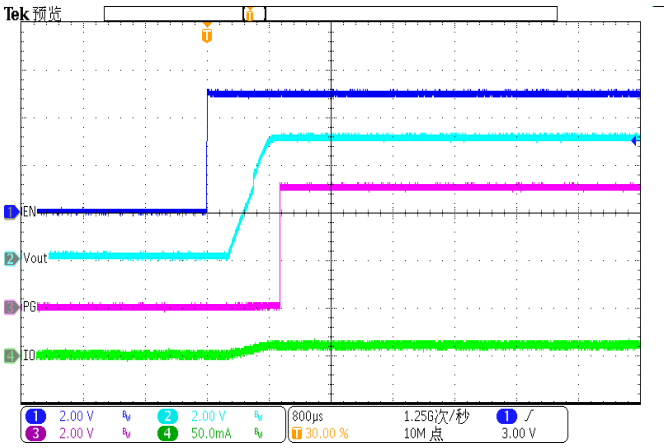

1
2
3
5
4

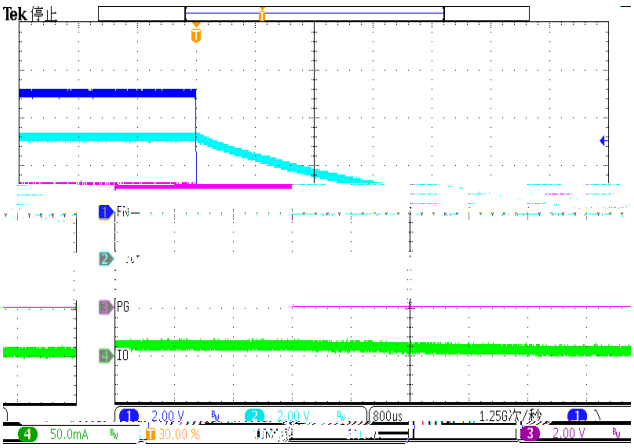

Tek 停止
Vin
Vout
PG
IO
2.00 V
2.00 V
800µs
1.25G次/秒
30.00 %

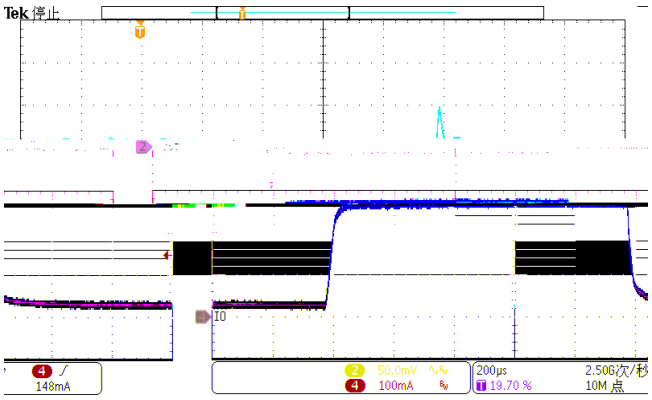

Tek 停止
Vin
Vout
PG
IO
2.00 V
10.0ms
100M次/秒
30.00 %
2.00 V
50.0mA

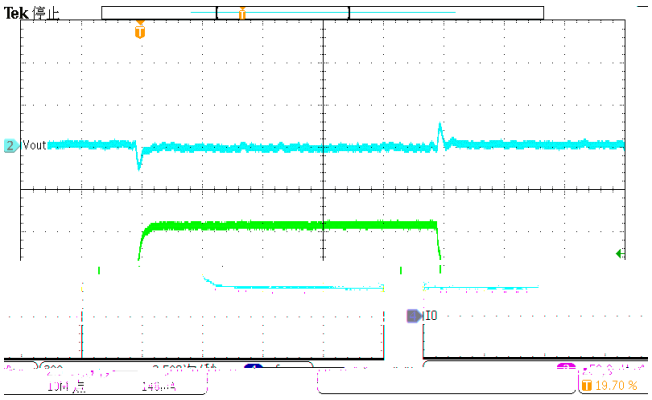

Tek 停止
Vin
Vout
PG
IO
2.00 V
2.00 V
2.00 V
50.0mA
40.0ms
25.0M次/秒
30.00 %
10M 点
3.00 V

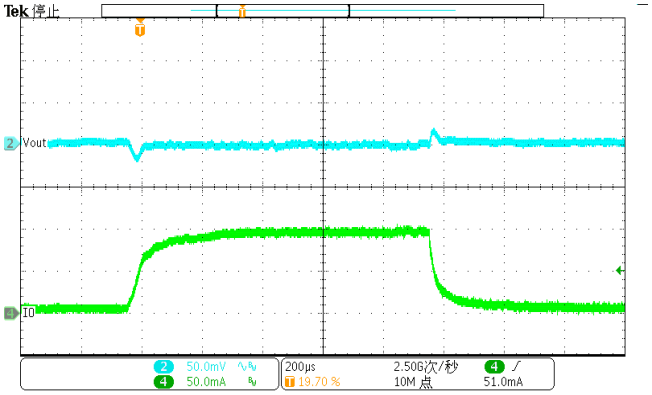

Tek 停止
Vout
PG
2.00 V
50.0mA
40.0ms
25.0M次/秒
30.00 %
10M 点
3.00 V
2.00 V
2.00 V

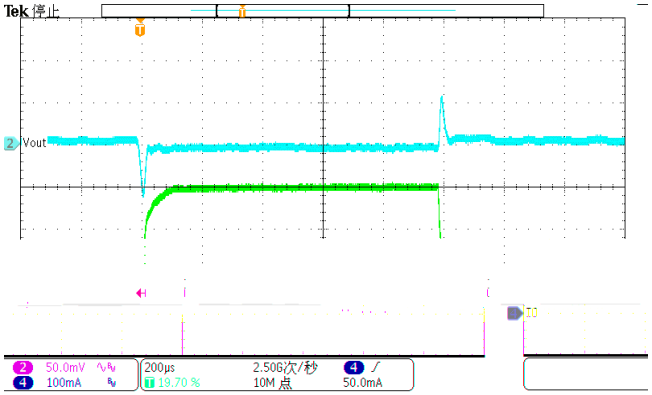

Tek 预览
EN
Vout
PG
IO
2.00 V
2.00 V
2.00 V
50.0mA
800µs
1.25G次/秒
30.00 %
10M 点
3.00 V

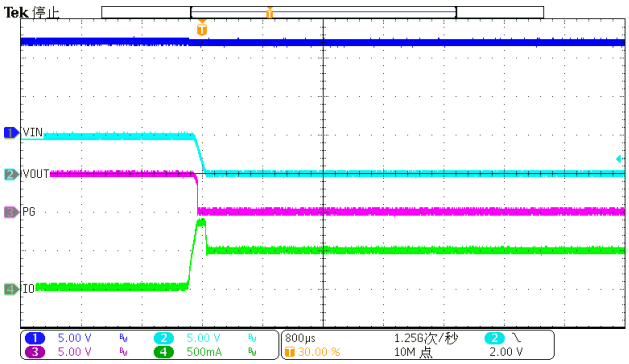

Tek 停止
PG
IO
2.00 V
2.00 V
800µs
1.25G次/秒
50.0mA
30.00 %
2.00 V

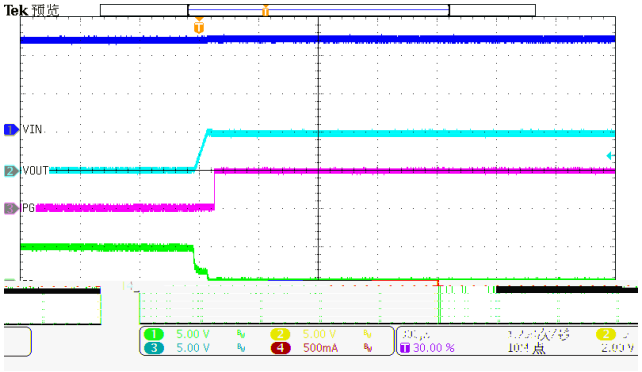

Tek 停止
IO
148mA
50.0mV
100mA
200µs
19.70 %
2.50G次/秒
10M 点


Tek 停止
Vout
IO
19.70 %


Tek 停止
Vout
IO
50.0mV
50.0mA
200µs
19.70 %
2.50G次/秒
10M 点
51.0mA

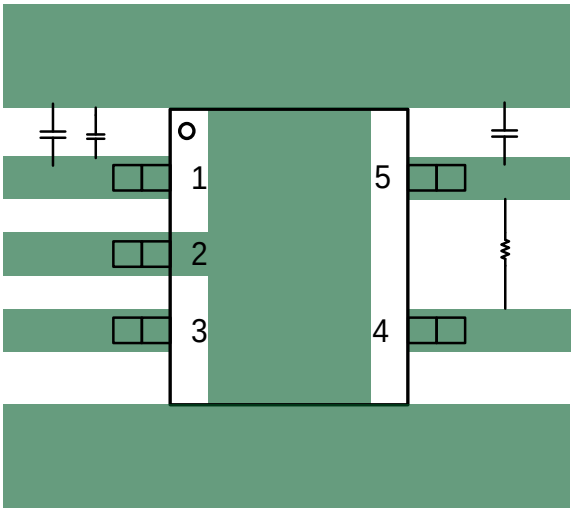

Tek 停止
Vout
IO
50.0mV
100mA
200µs
19.70 %
2.50G次/秒
10M 点
50.0mA

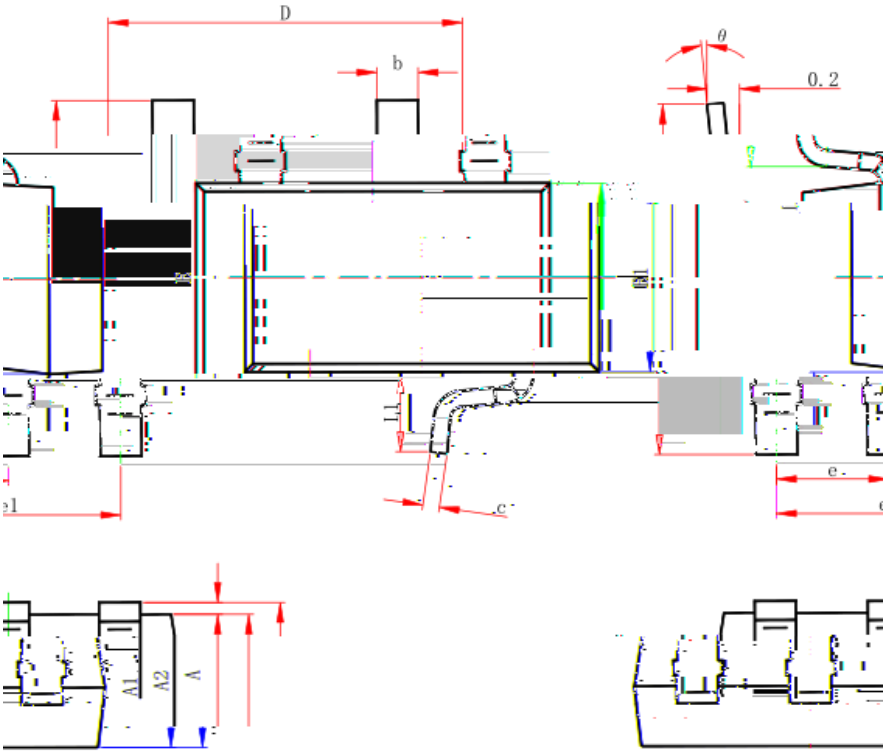

Tek 停止
VIN
VOUT
PG
IO
5.00 V
5.00 V
5.00 V
500mA
800µs
30.00 %
1.25G次/秒
10M 点
2.00 V


Tek 预览
VIN
VOUT
PG
5.00 V
5.00 V
5.00 V
500mA
30.00 %

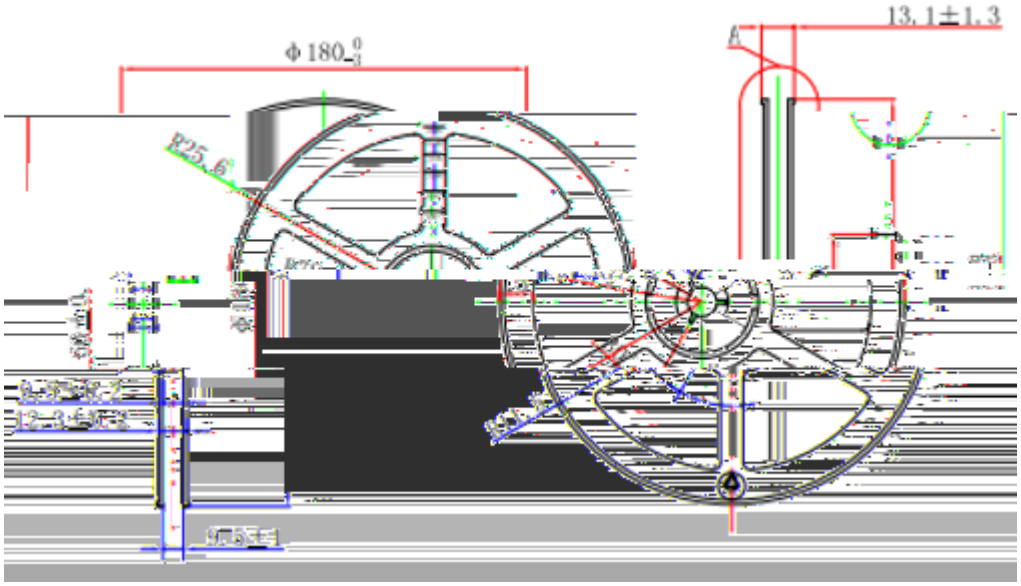
1.
2.

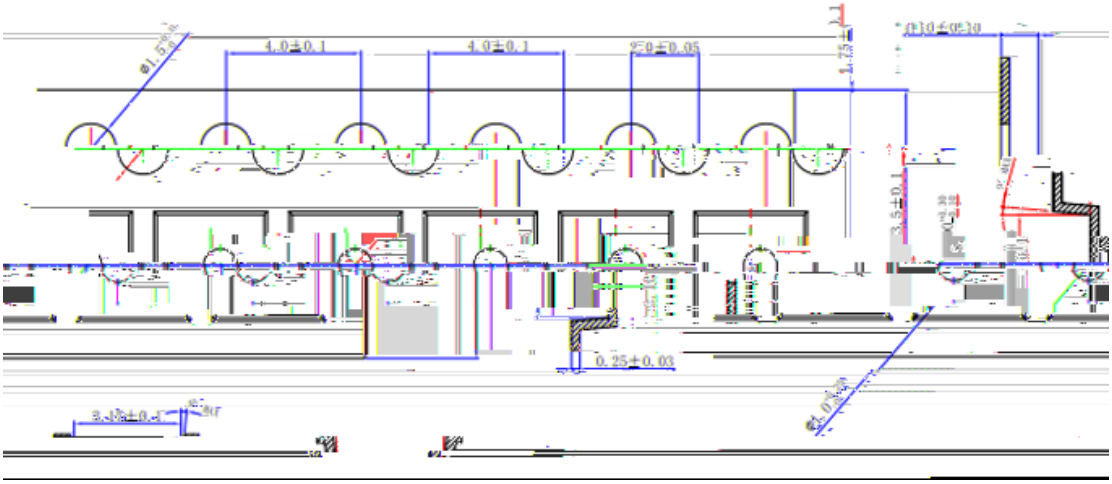
3.
4.

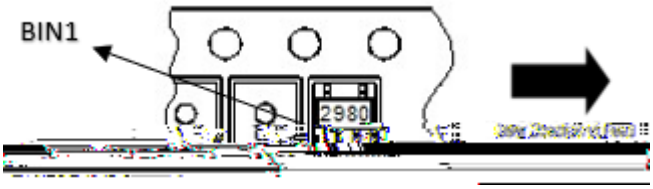




1.
2.
3.
4.
5.
6.


13.1±1.3
Φ180
R25.6


4.0±0.1
4.0±0.1
2.0±0.05
3.5±0.1
0.25±0.03


BIN1
2980