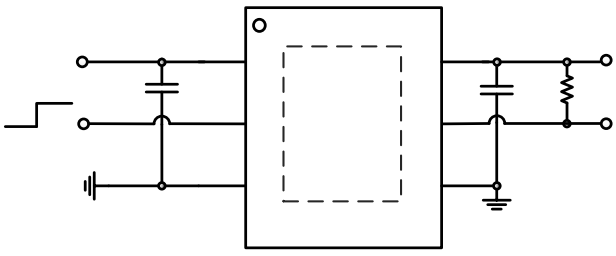
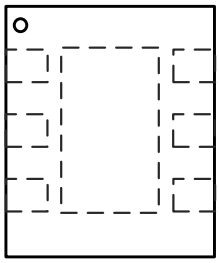
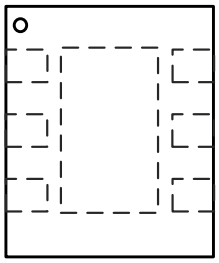
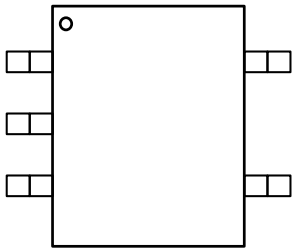
3V-40V Vin, 300mA, 2.4uA I_Q, Low-Dropout Regulator with PG Feature









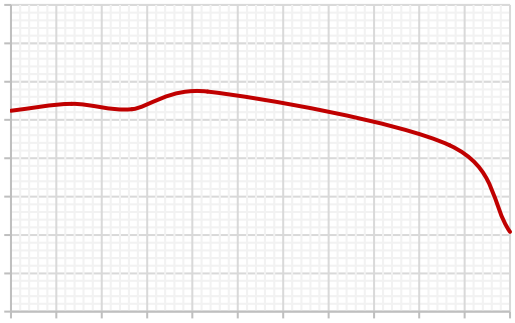
(1)

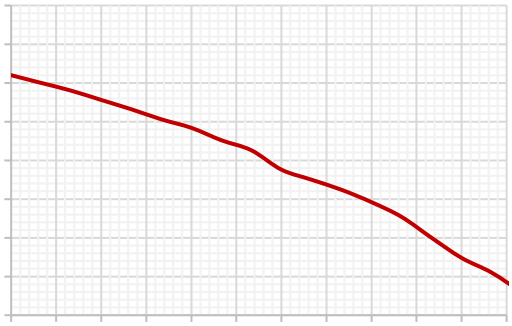
(2)

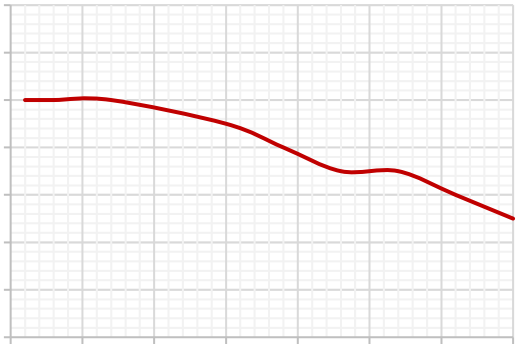
(1)

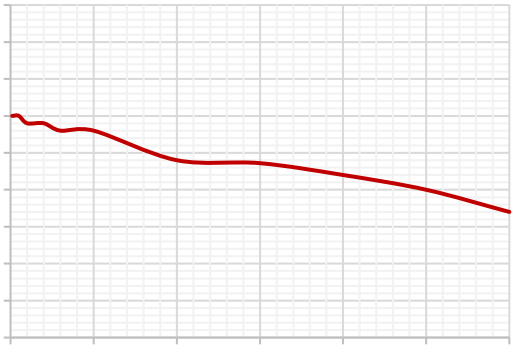
(2)

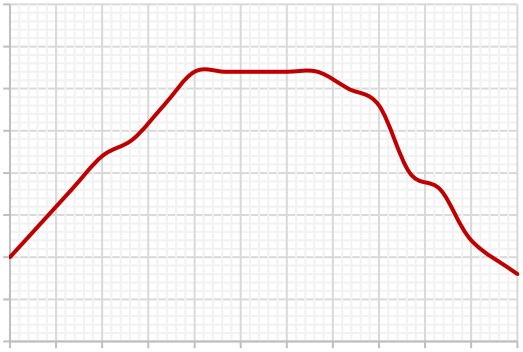
(3)

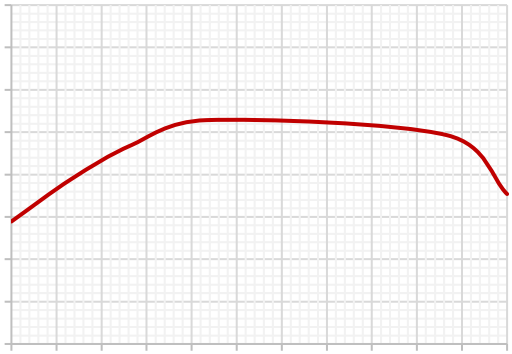


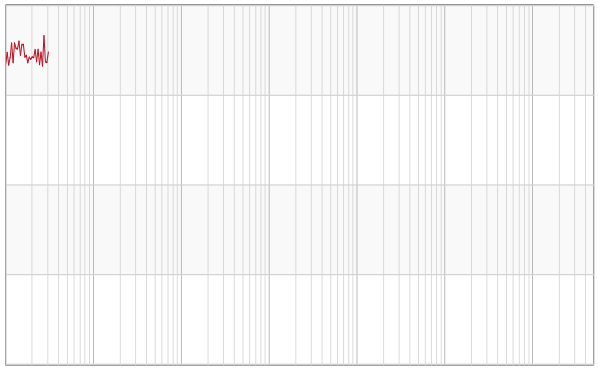


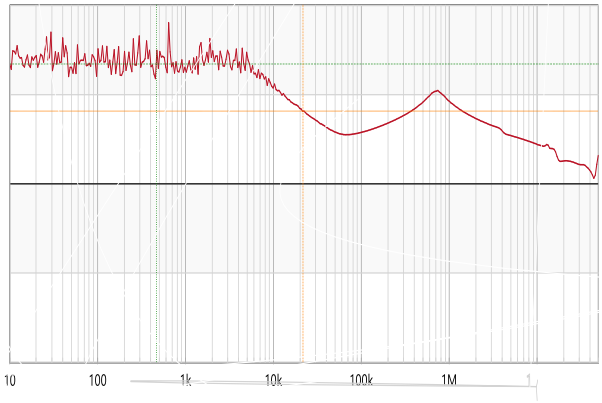


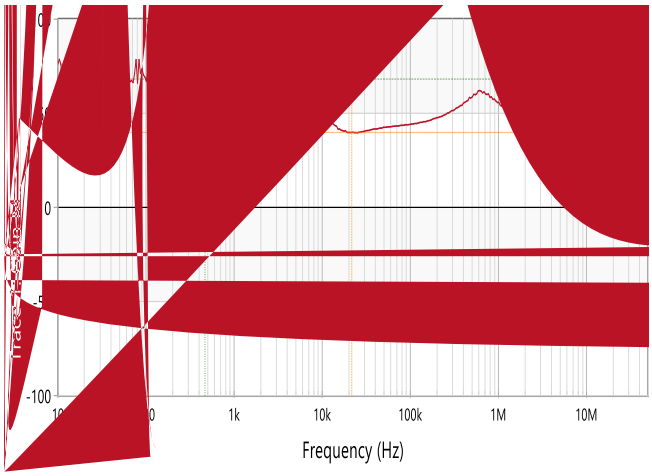


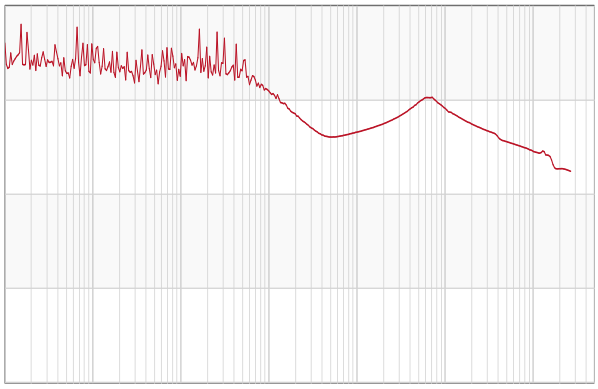


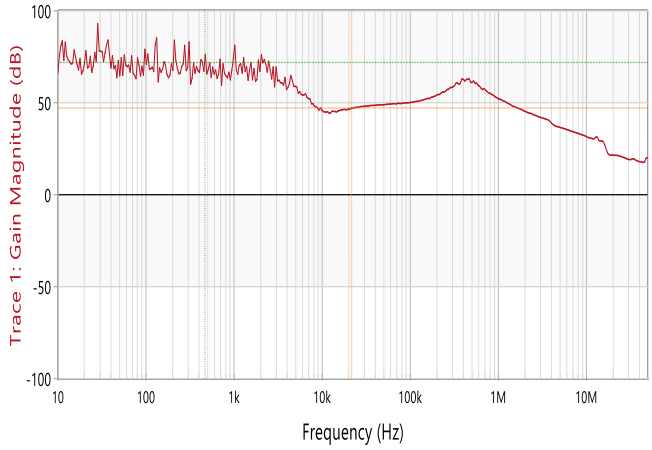


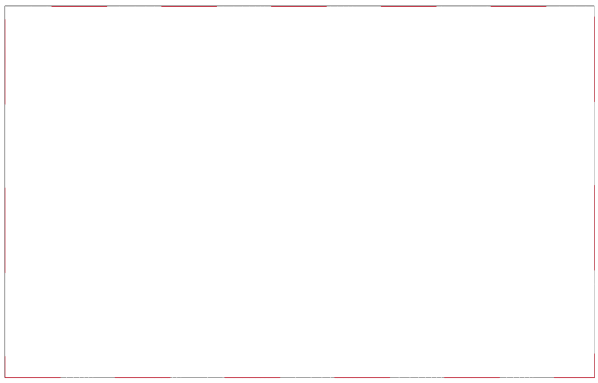


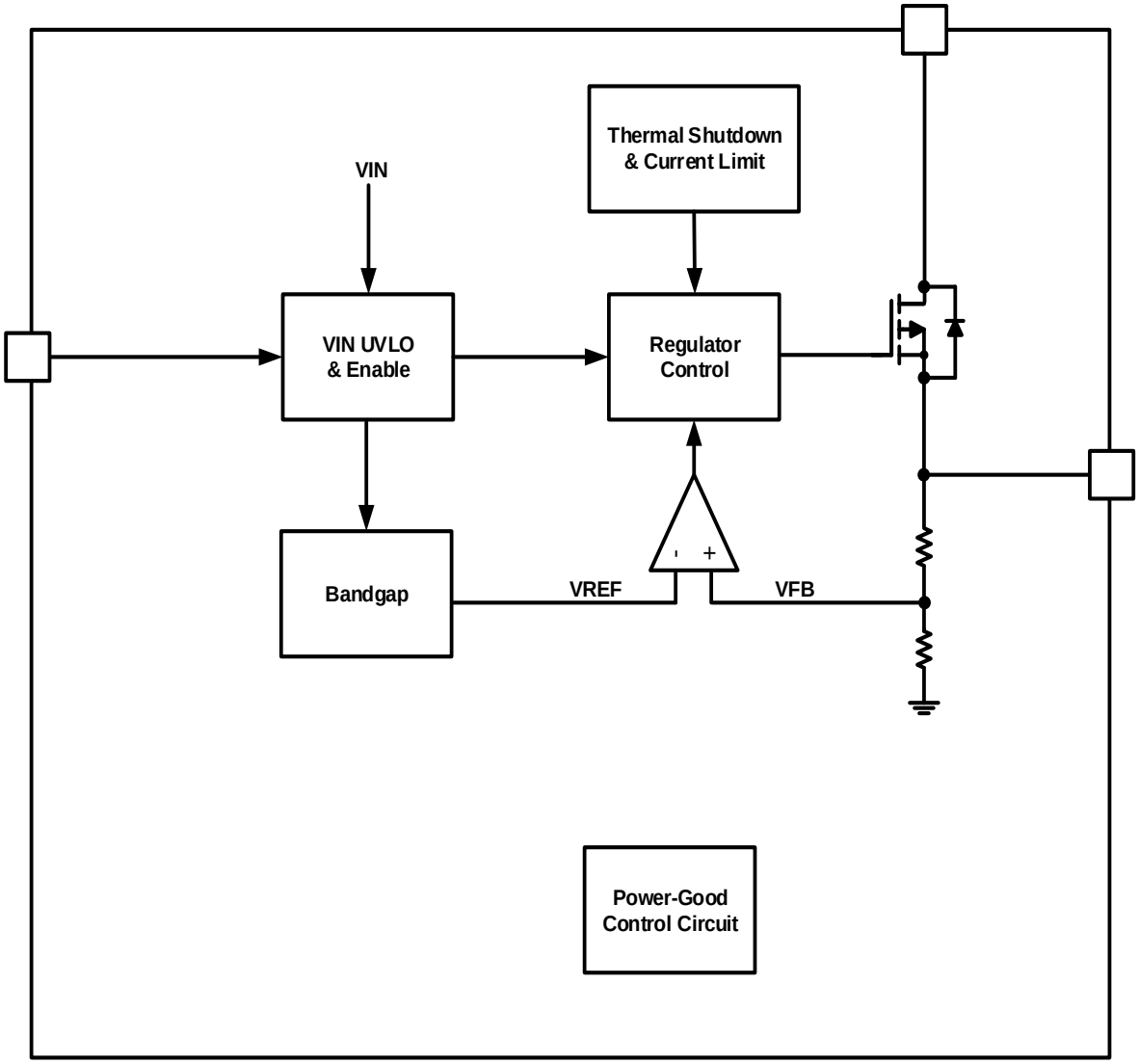

10
100
1k
10k
100k
1M


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



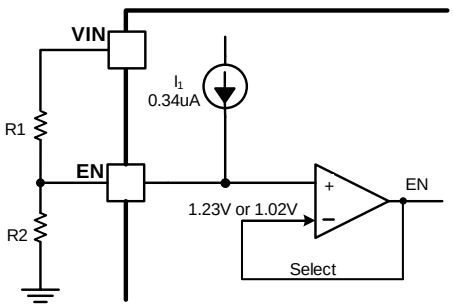

Trace 1: Gain Magnitude (dB)
100
50
0
-50
-100
10
100
1k
10k
100k
1M
10M
Frequency (Hz)

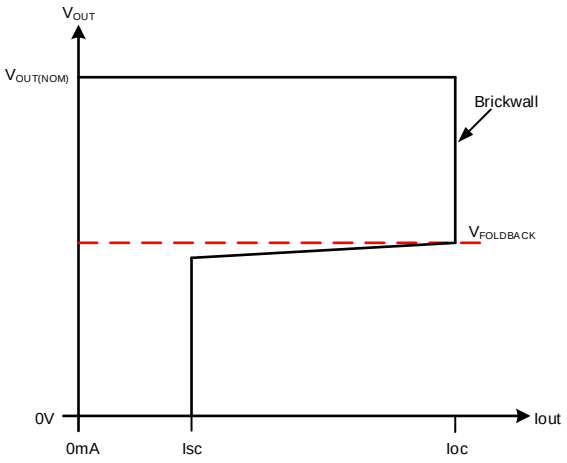



Thermal Shutdown
& Current Limit
VIN
VIN UVLO
& Enable
Regulator
Control
Bandgap
VREF
VFB
Power-Good
Control Circuit

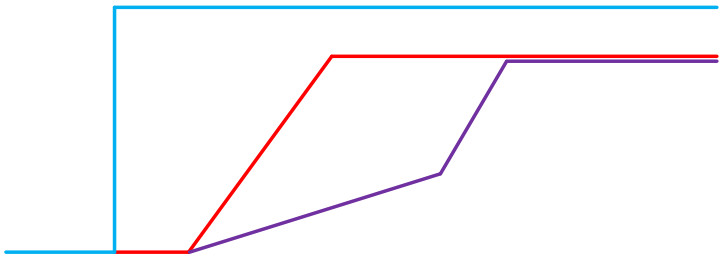
$G\ A$

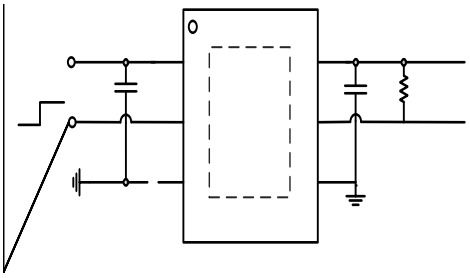
r $G\ A$ G

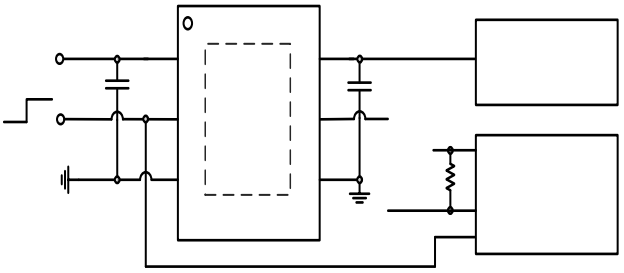


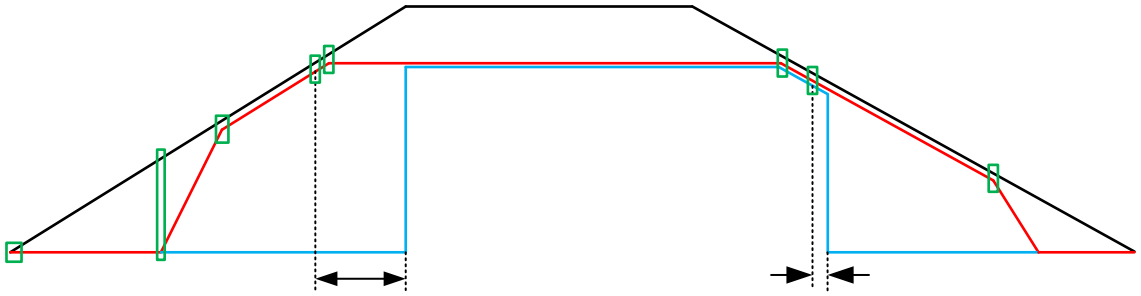

VOUT
VOUT(NOM)
Brickwall
VFOLDBACK
0V
Iout
0mA
Isc
Ioc

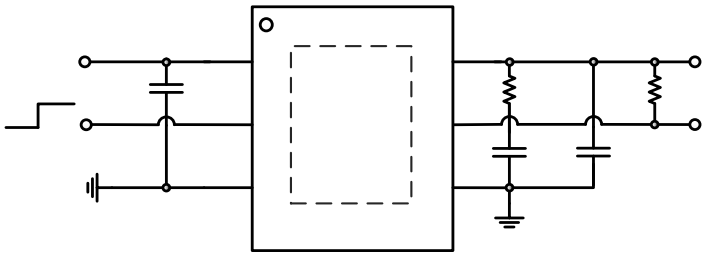
m m $\frac{o}{4}$ $\frac{o}{4}$

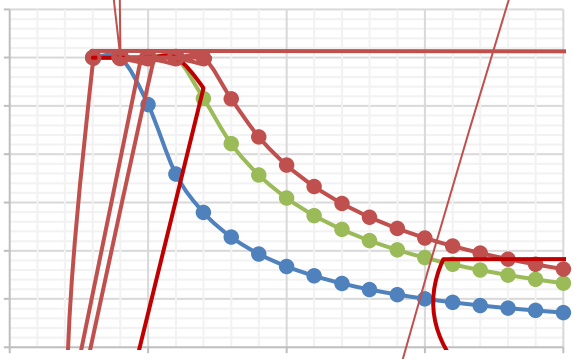


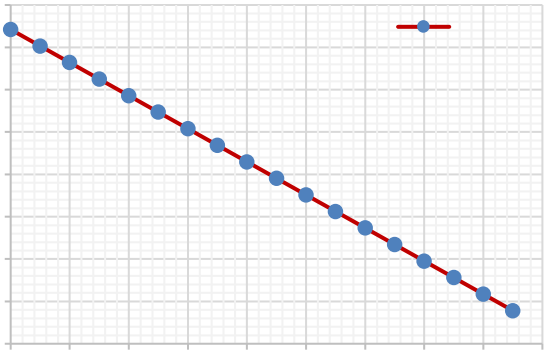


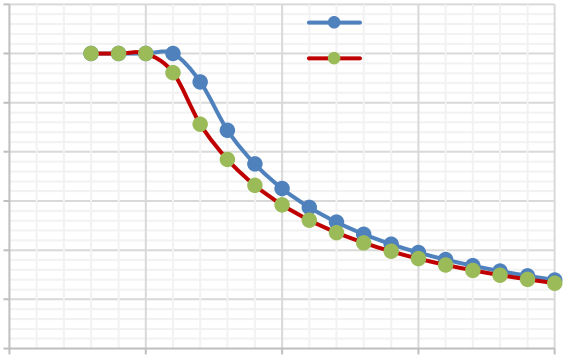


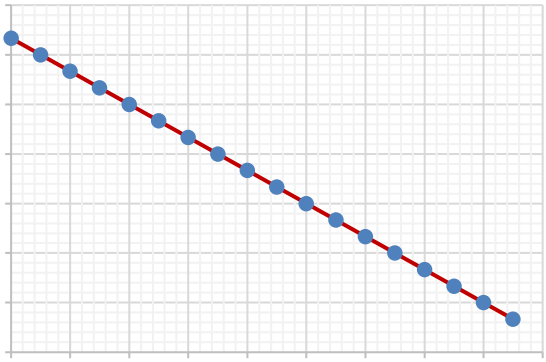












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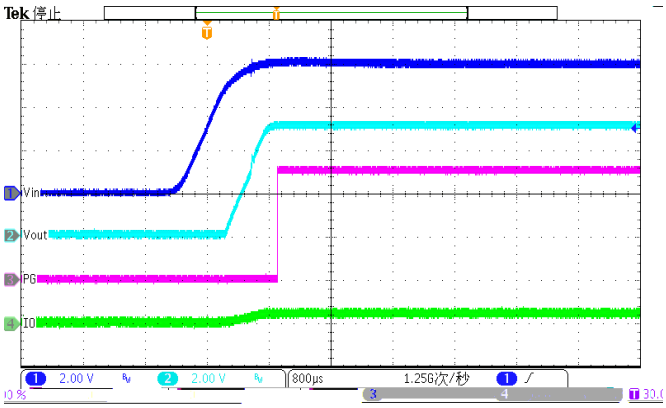
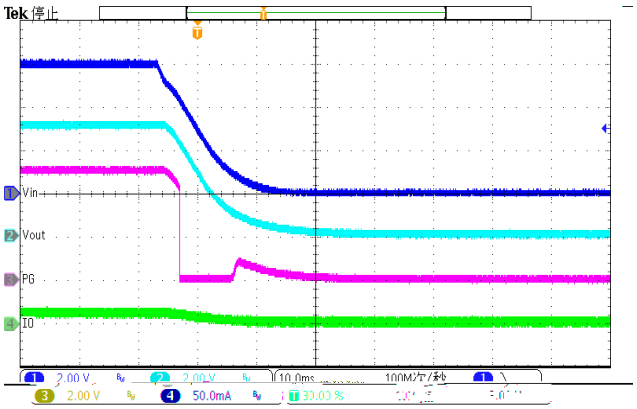
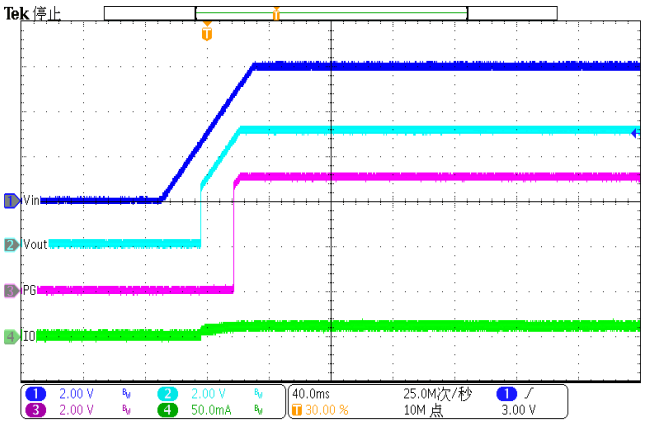
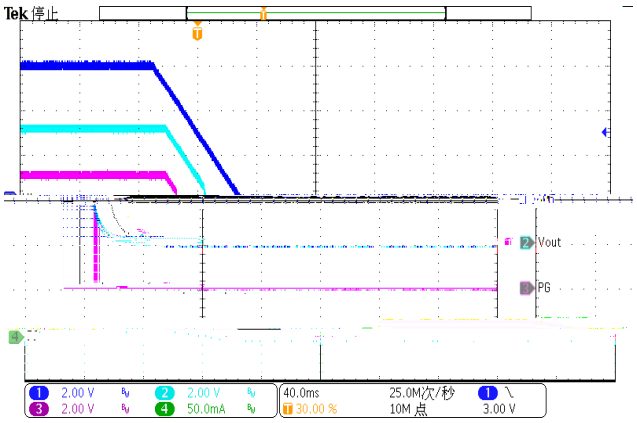
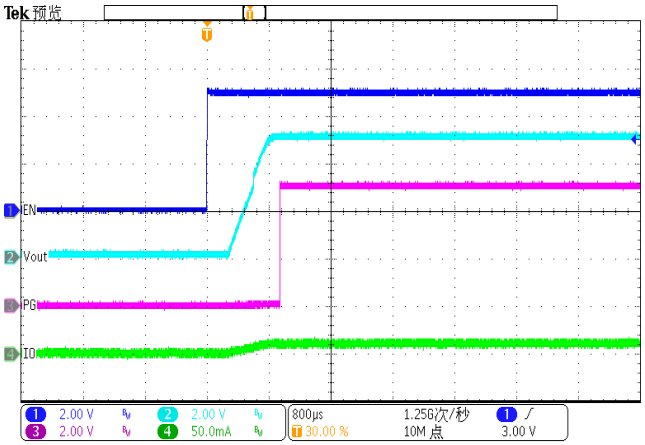
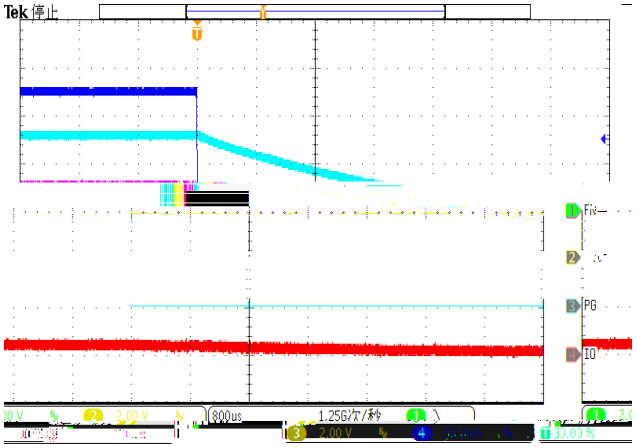

Tek 停止
Vin
Vout
PG
IO
800µs
1.25G次/秒

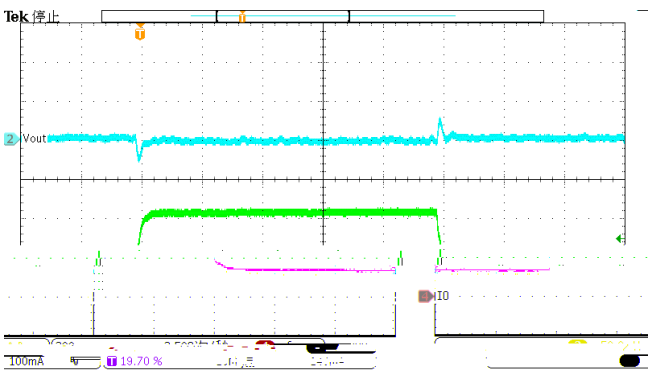

Tek 停止
Vin
Vout
PG
IO
50.0mA

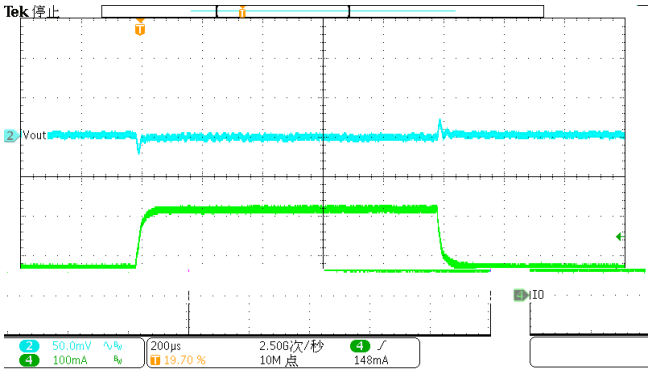

Tek 停止
Vin
Vout
PG
IO
40.0ms
25.0M次/秒
10M 点
3.00 V

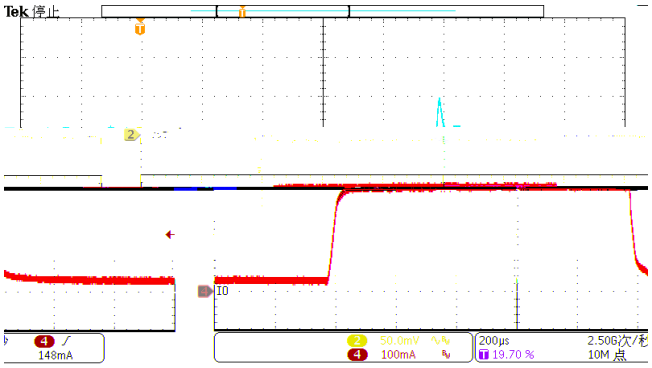

Tek 停止
Vout
PG
40.0ms
25.0M次/秒
10M 点
3.00 V

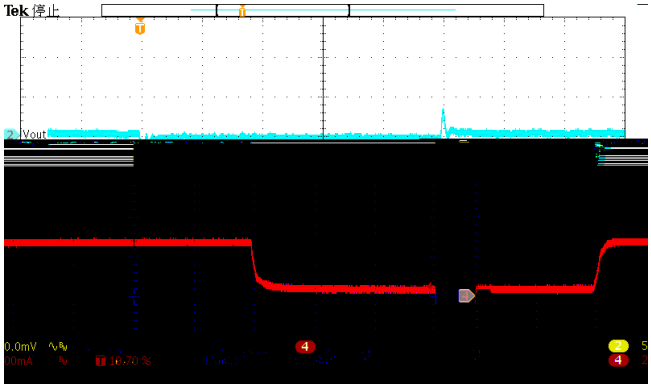

Tek 预览
EN
Vout
PG
IO
800µs
1.25G次/秒
10M 点
3.00 V

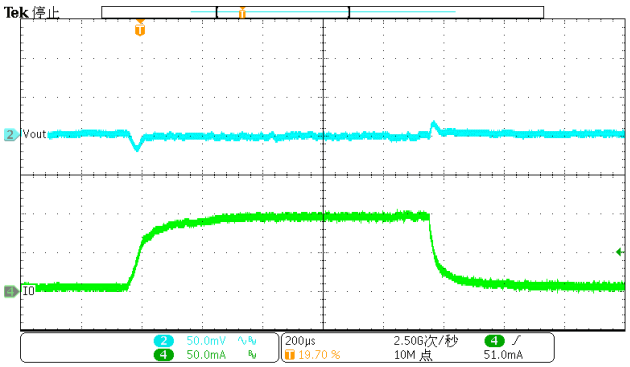

Tek 停止
PG
IO
800µs
1.25G次/秒

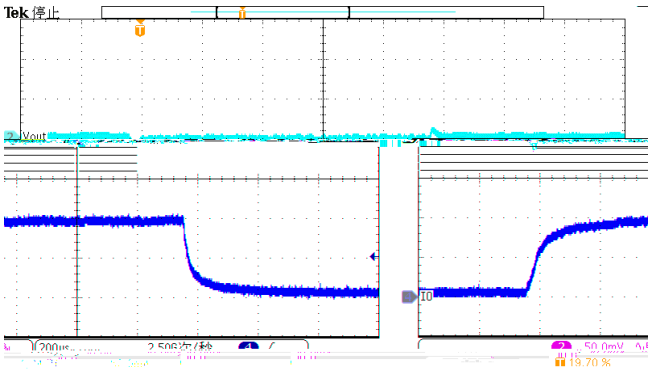

Tek 停止
Vout
IO
100mA
19.70 %

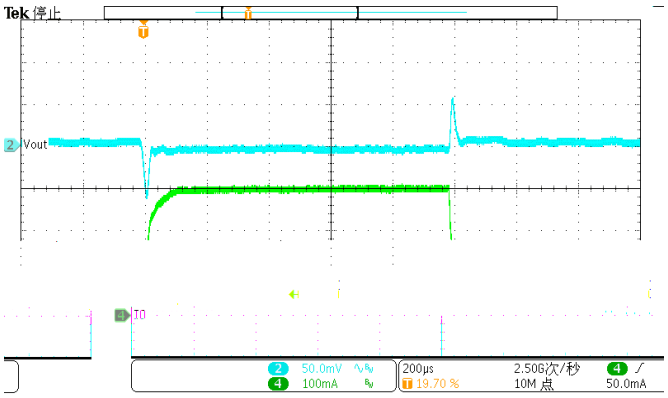

Tek 停止
Vout
IO
50.0mV
100mA
200µs
19.70 %
2.50G次/秒
10M 点
148mA

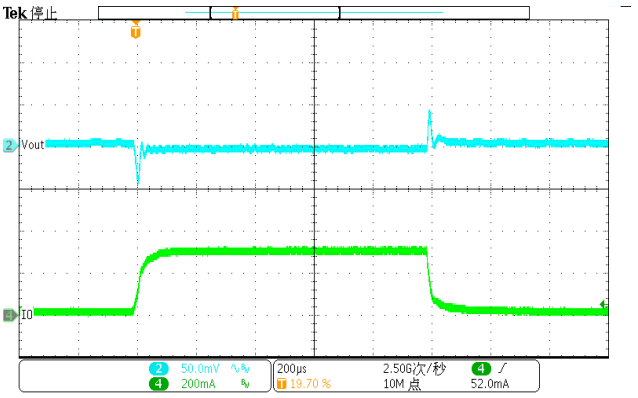

Tek 停止
IO
148mA
50.0mV
100mA
200µs
19.70 %
10M 点

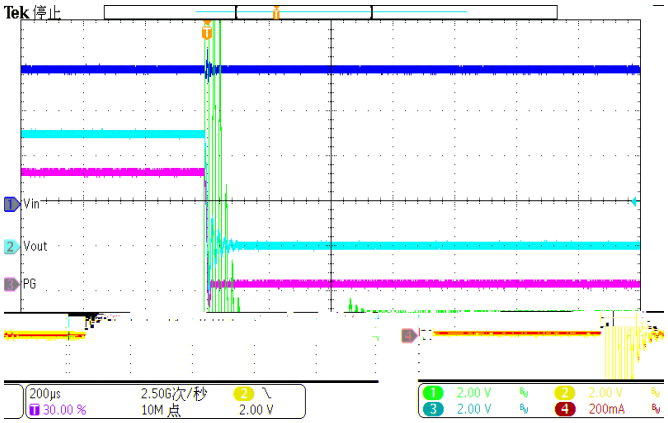

Tek 停止
Vout

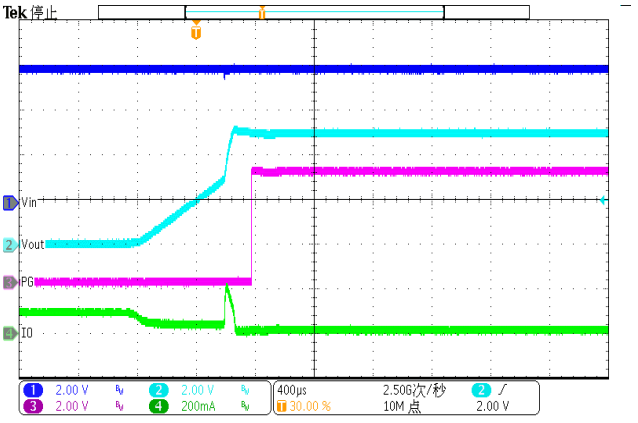

Tek 停止
Vout
IO
50.0mV
50.0mA
200µs
19.70 %
2.50G次/秒
10M 点
51.0mA

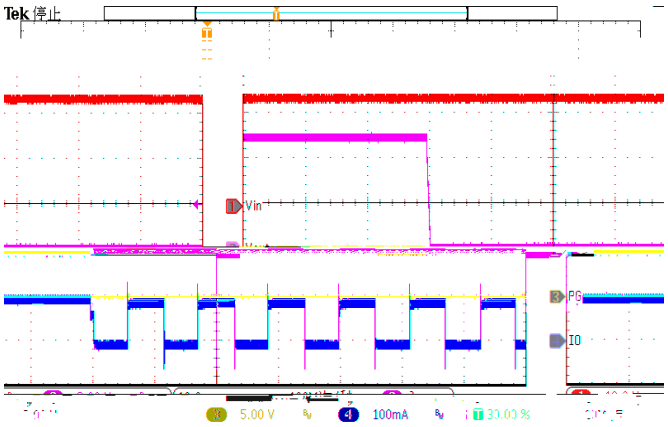

Tek 停止
Vout
IO
19.70 %

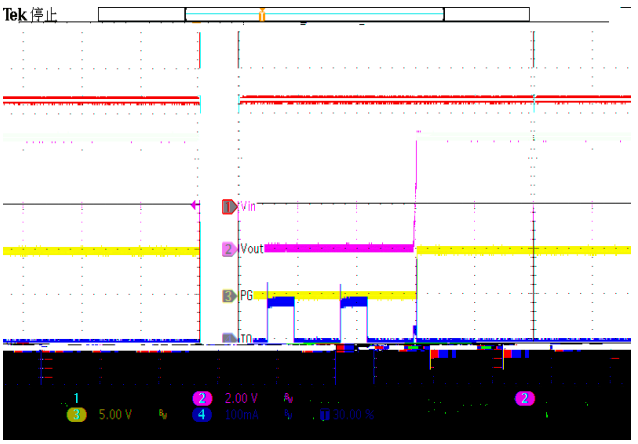

Tek 停止
Vout
IO
50.0mV
100mA
200µs
19.70 %
2.50G次/秒
10M 点
50.0mA


Tek 停止
Vout
IO
50.0mV
200mA
200µs
19.70 %
2.50G次/秒
10M 点
52.0mA


Tek 停止
Vin
Vout
PG
200µs
30.00 %
2.50G次/秒
10M 点
2.00 V
2.00 V
2.00 V
200mA


Tek 停止
Vin
Vout
PG
IO
2.00 V
2.00 V
2.00 V
200mA
400µs
30.00 %
2.50G次/秒
10M 点
2.00 V

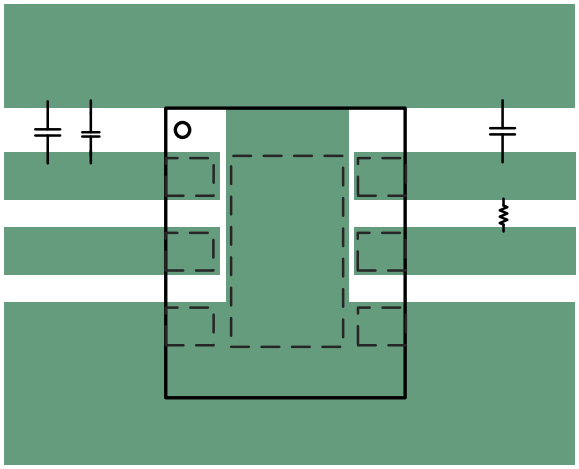

Tek 停止
Vin
PG
IO
5.00 V
100mA
30.00 %

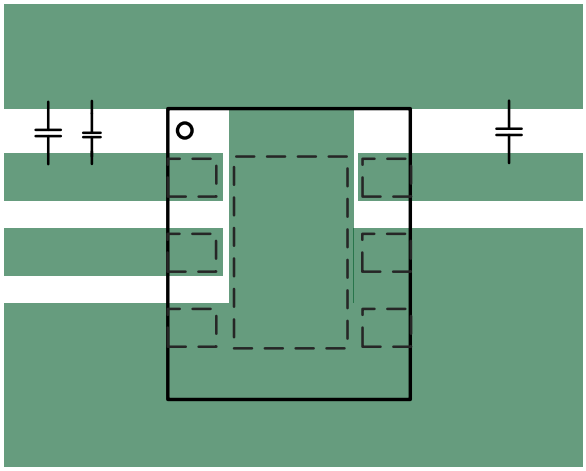

Tek 停止
Vin
Vout
PG
IO
5.00 V
2.00 V
100mA
30.00 %

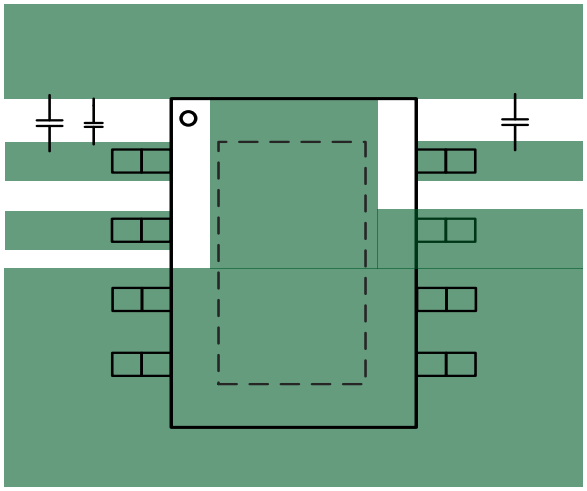
1.
2.

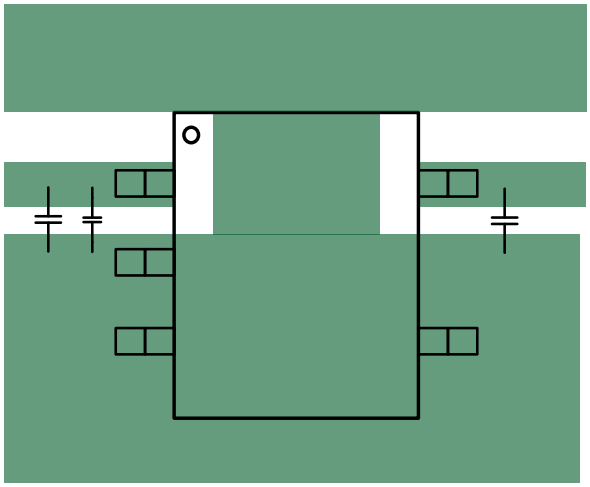
3.
4.

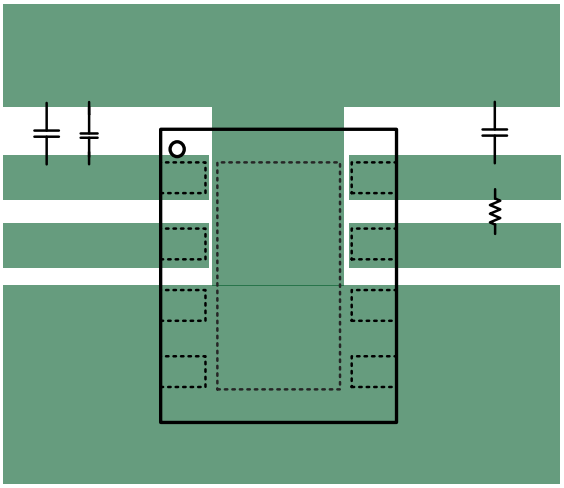
5.

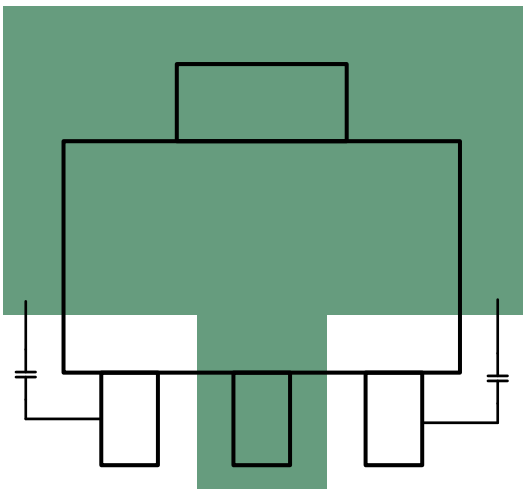


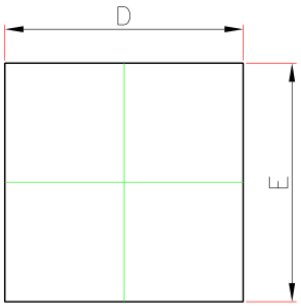




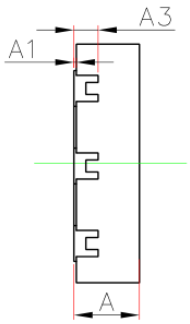




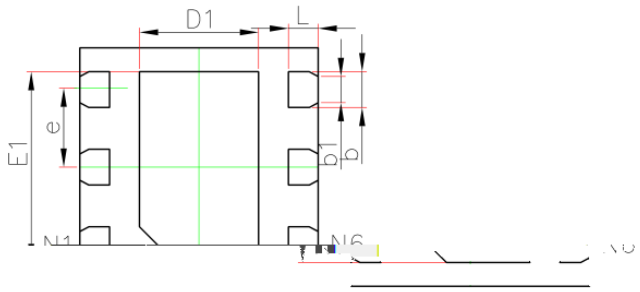




TOP VIEW

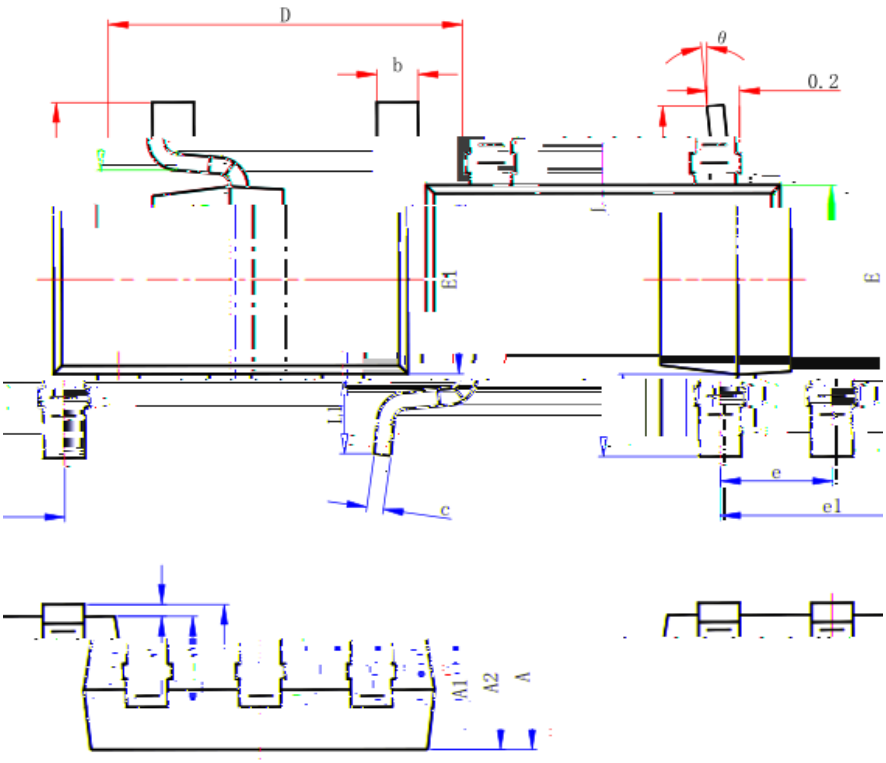


SIDE VIEW

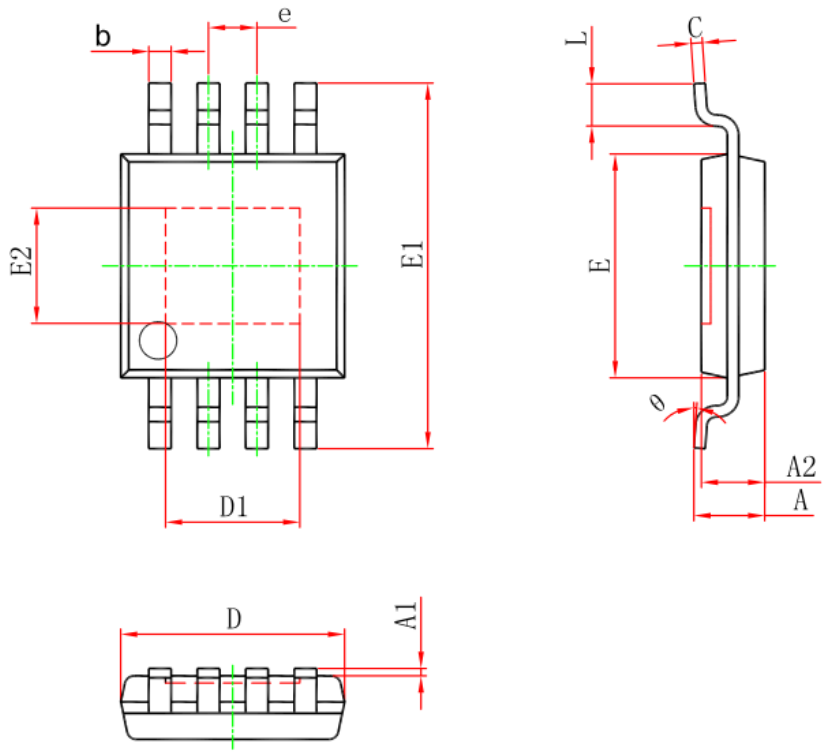


BOTTOM VIEW

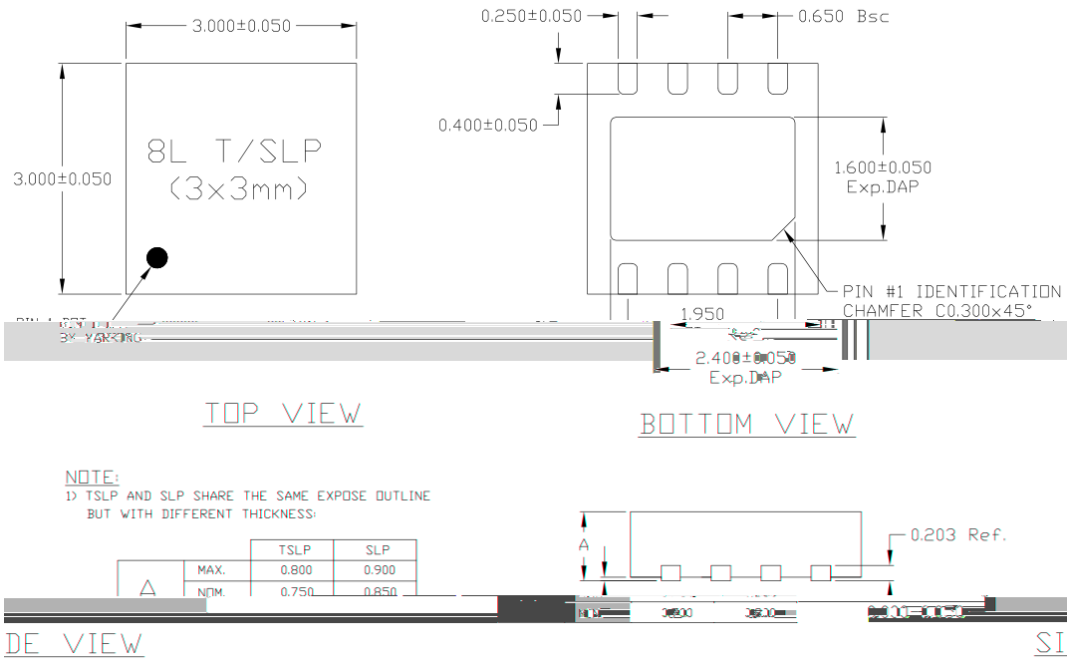
1.
2.
3.
4.
5.
6.



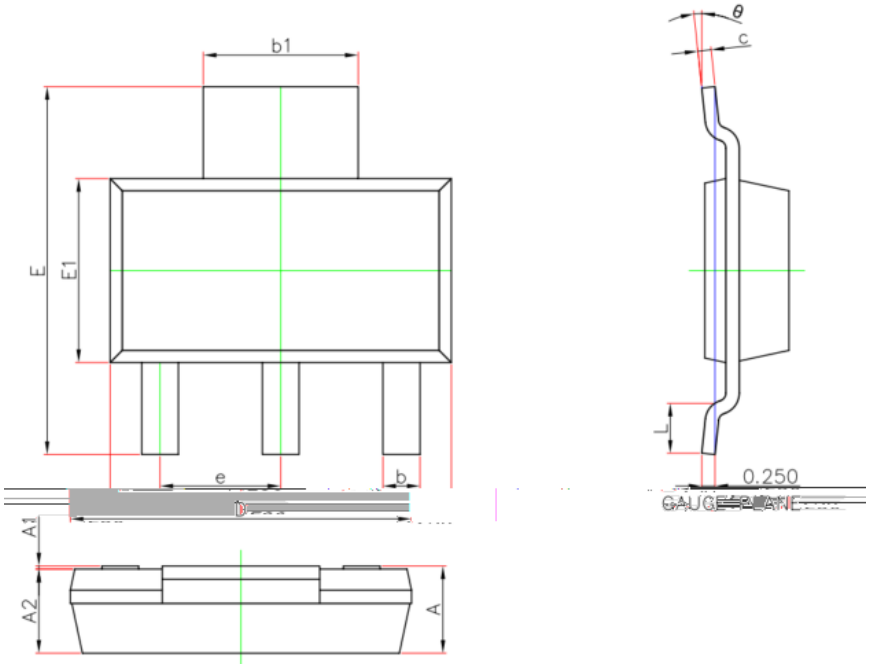
1.
2.
3.
4.
5.
6.



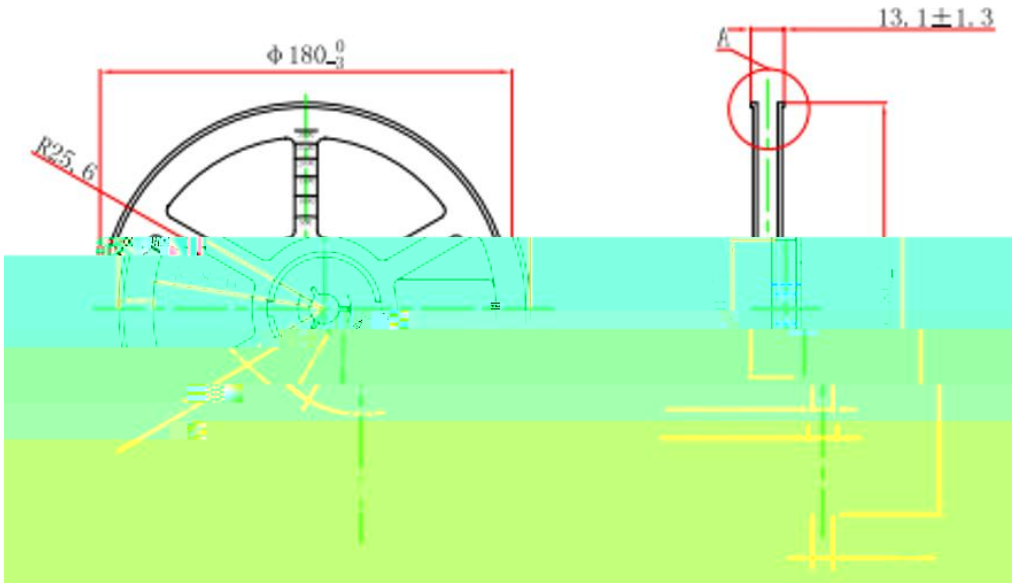
1.
2.
3.
4.
5.
6.

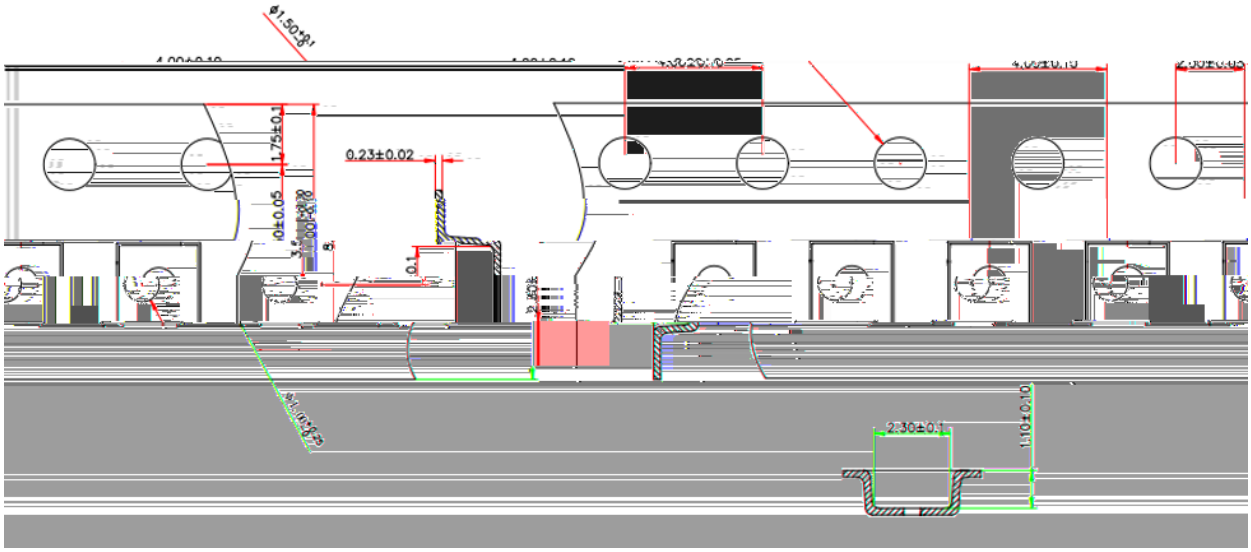

3.000±0.050
3.000±0.050
8L T/SLP
(3x3mm)
0.250±0.050
0.650 Bsc
0.400±0.050
1.600±0.050
Exp.DAP
PIN #1 IDENTIFICATION
CHAMFER C0.300x45°
1.950
Exp.DAP
TOP VIEW
BOTTOM VIEW
NOTE:
1) TSLP AND SLP SHARE THE SAME EXPOSE OUTLINE
BUT WITH DIFFERENT THICKNESS:
TSLP
SLP
A
MAX.
0.800
0.900
NOM.
0.750
0.850
A
0.203 Ref.
DE VIEW
SI

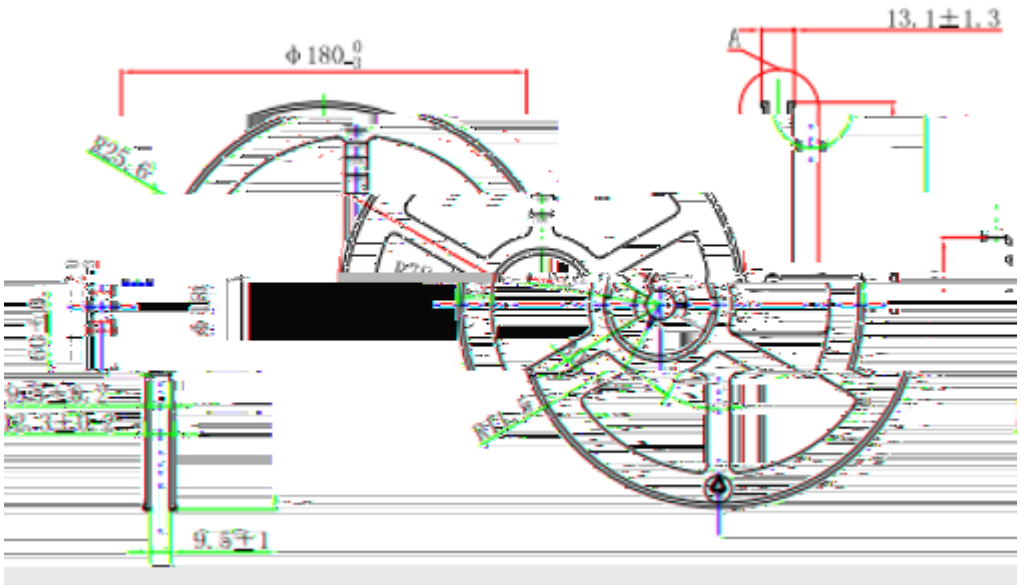
1.
2.
3.
4.
5.
6.

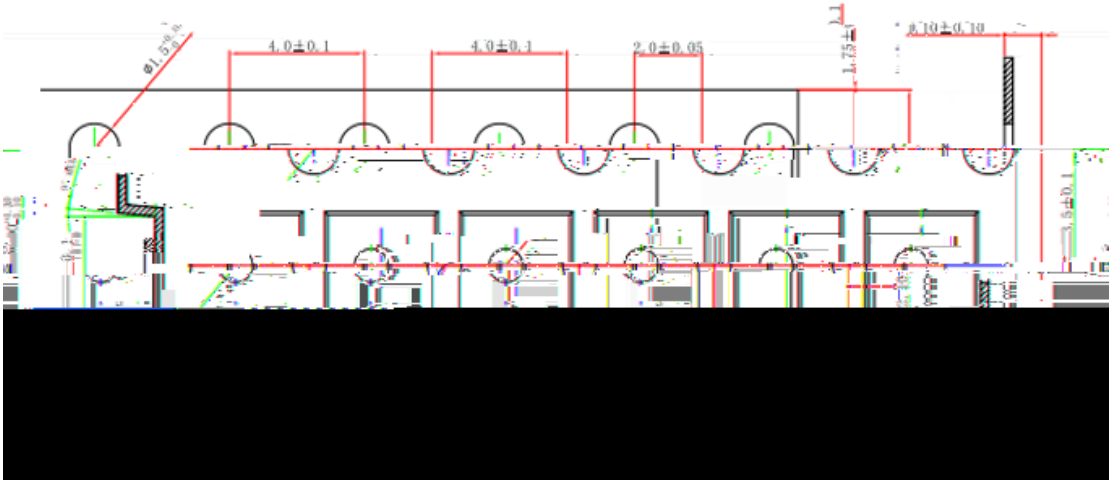


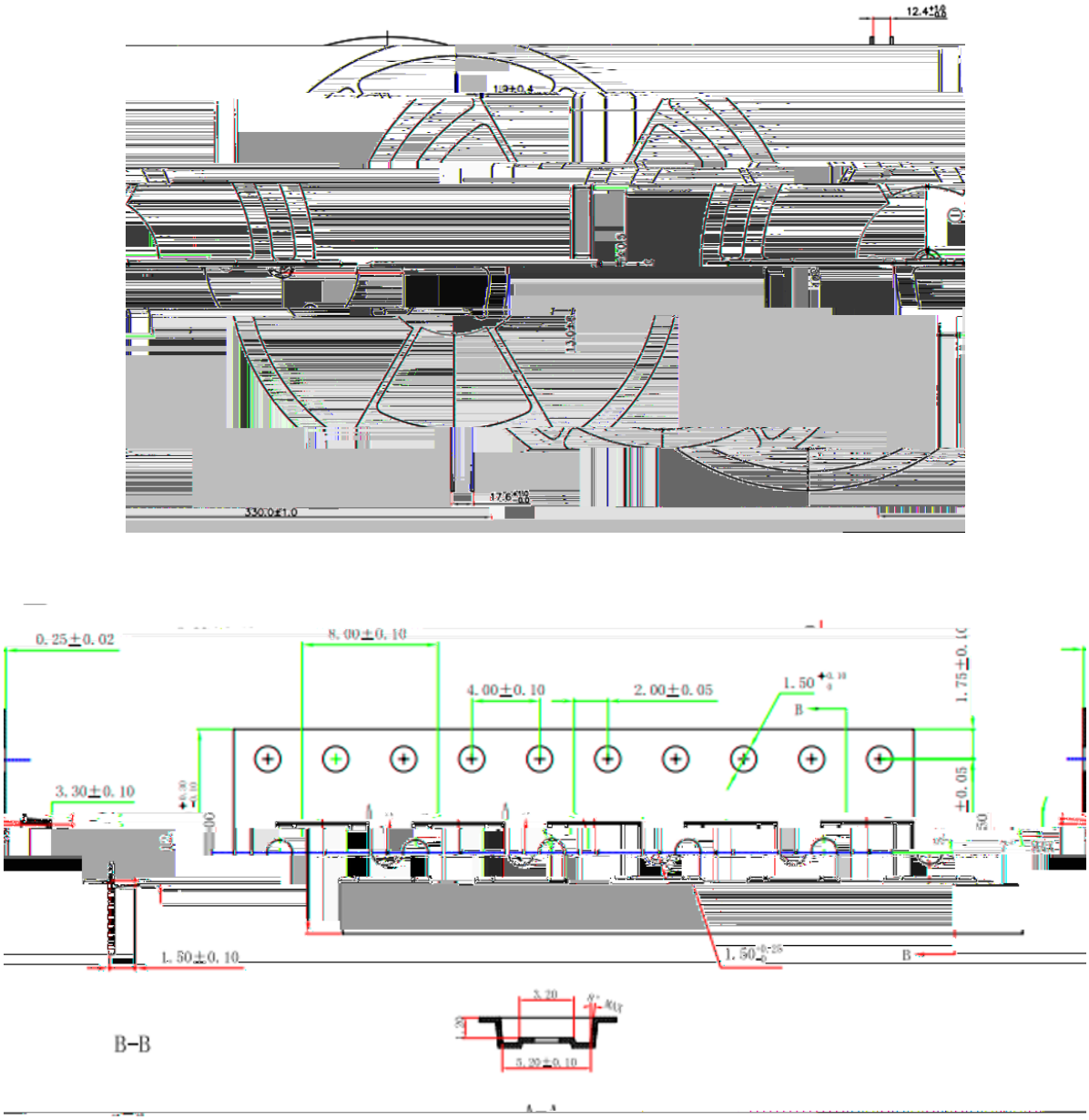
7.
8.
9.
10.
11.
12.

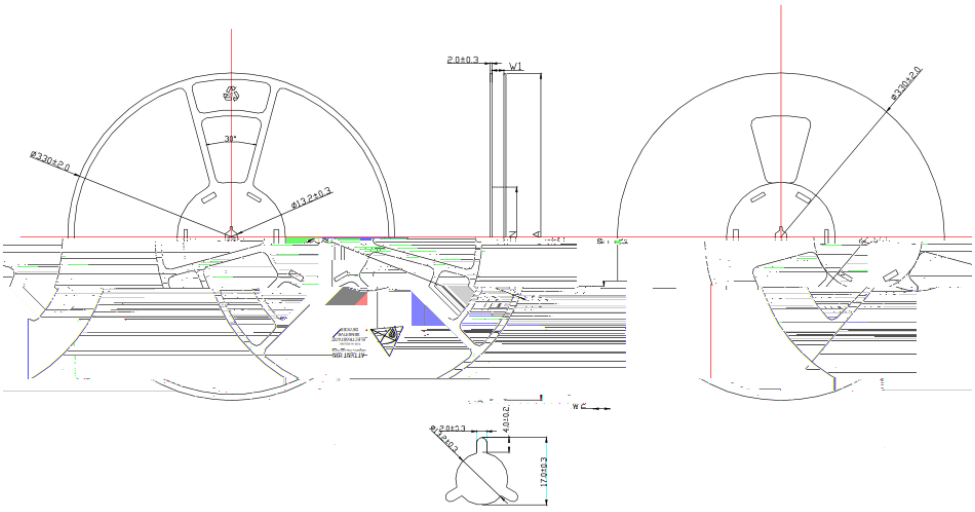

13.1±1.3
A
Φ180
R25.6


0.23±0.02
2.30±0.1
1.10±0.10


13.1±1.3
9.5±1


4.0±0.1
4.0±0.1
2.0±0.05


0.25±0.02
8.00±0.10
4.00±0.10
2.00±0.05
1.50
B
3.30±0.10
1.50±0.10
1.50
B
B-B
3.20
3.20±0.10



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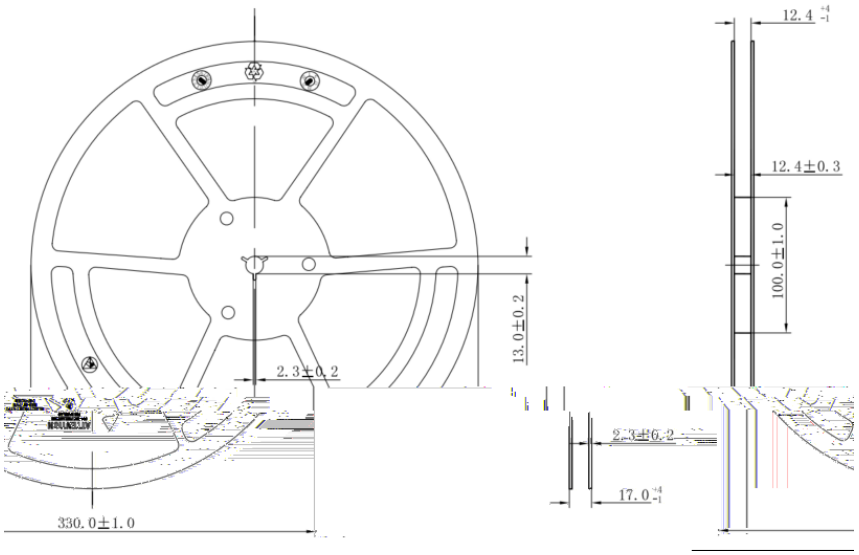
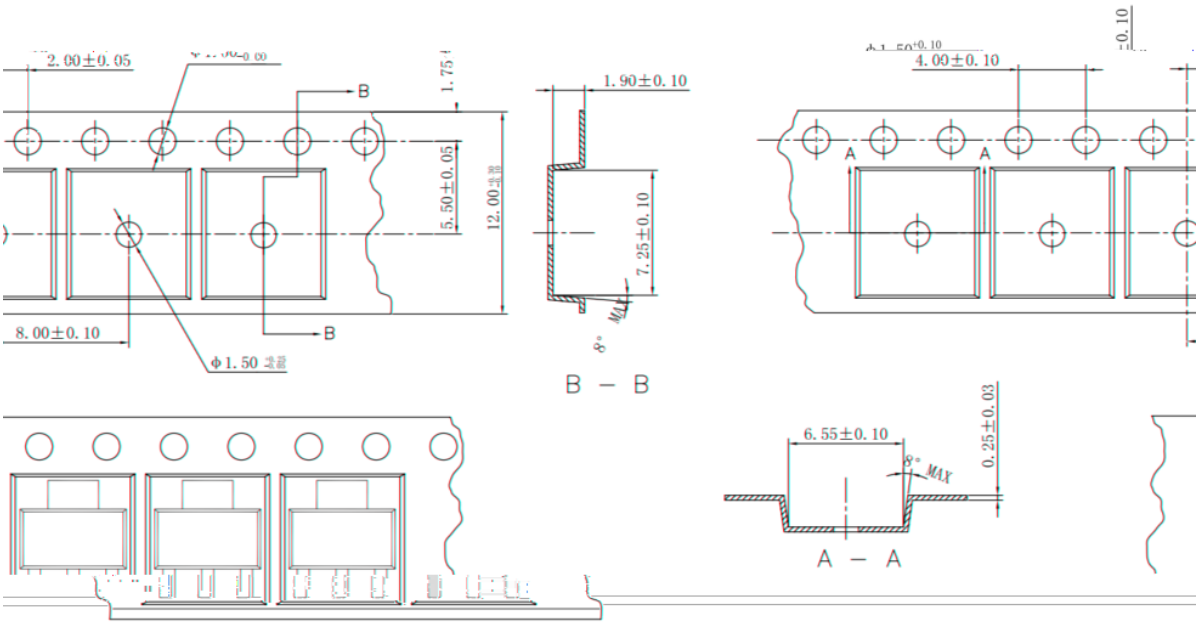

12.4
12.4±0.3
100.0±1.0
13.0±0.2
2.3±0.2
2.3±0.2
17.0
330.0±1.0


2.00±0.05
B
1.75
5.50±0.05
12.00
8.00±0.10
B
Φ1.50
1.90±0.10
7.25±0.10
8° MAX
B – B
4.00±0.10
A
A
6.55±0.10
8° MAX
0.25±0.03
A – A

产品装载示意图