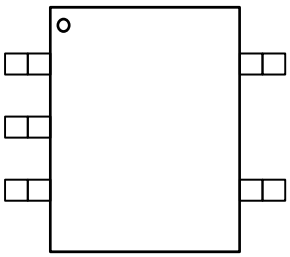
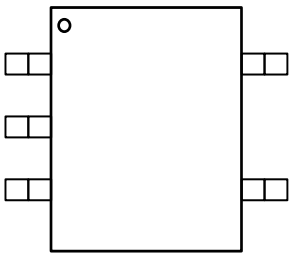
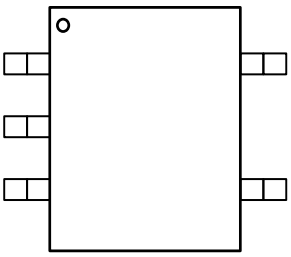
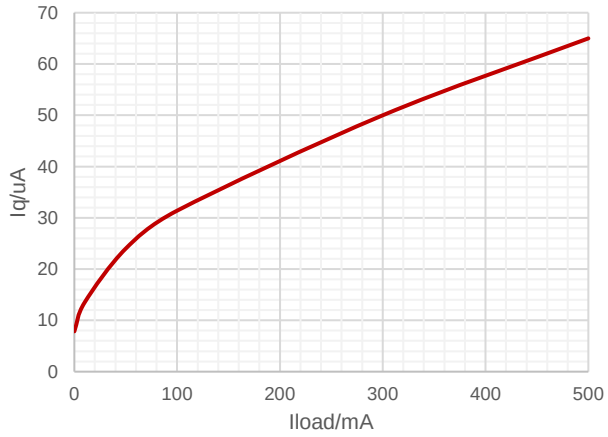
1.7V-6V Vin, 500mA, 8uA I_Q, Low-Dropout Regulator

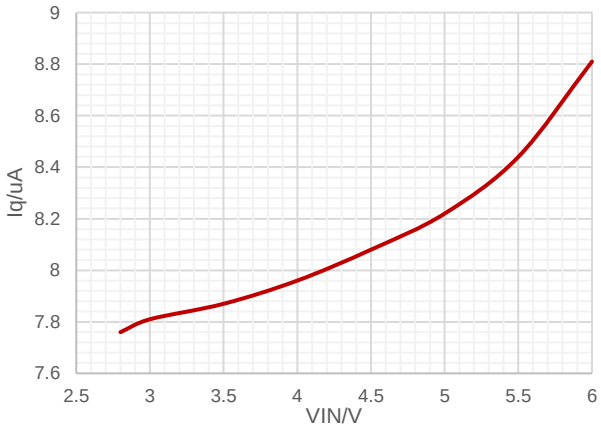
				5	Tape & Reel, 3000
				5	Tape & Reel, 3000
				5	Tape & Reel, 3000
				5	Tape & Reel, 3000
				6	Tape & Reel, 3000
				6	Tape & Reel, 3000
				6	Tape & Reel, 3000
				8	Tape & Reel, 5000
				5	Tape & Reel, 3000
				6	Tape & Reel, 3000

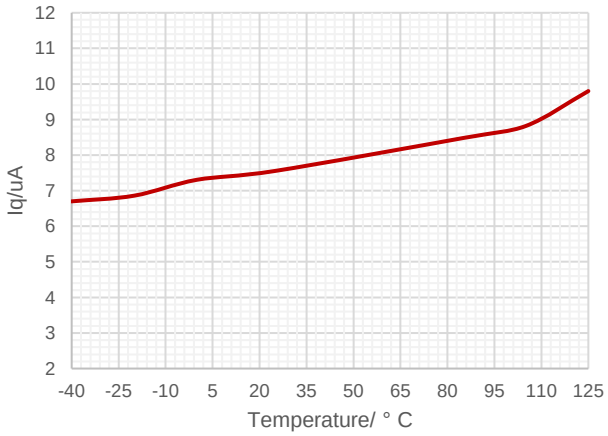




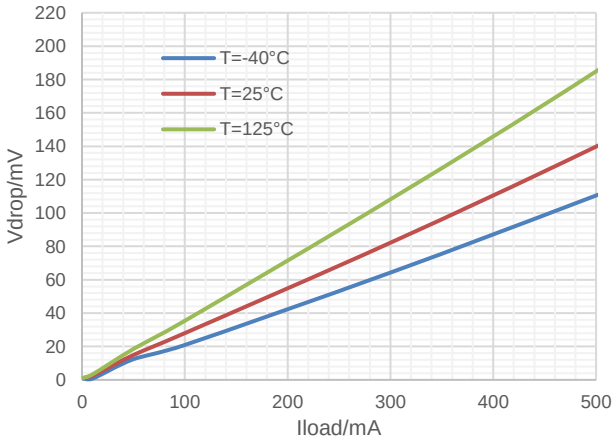
(2)

(3)


70
60
50
40
30
20
10
0
Iq/uA
0
100
200
300
400
500
Iload/mA


9
8.8
8.6
8.4
8.2
8
7.8
7.6
Iq/uA
2.5
3
3.5
4
4.5
5
5.5
6
VIN/V


12
11
10
9
8
7
6
5
4
3
2
Iq/uA
-40
-25
-10
5
20
35
50
65
80
95
110
125
Temperature/ ° C


220
200
180
160
140
120
100
80
60
40
20
0
Vdrop/mV
T=-40°C
T=25°C
T=125°C
0
100
200
300
400
500
Iload/mA

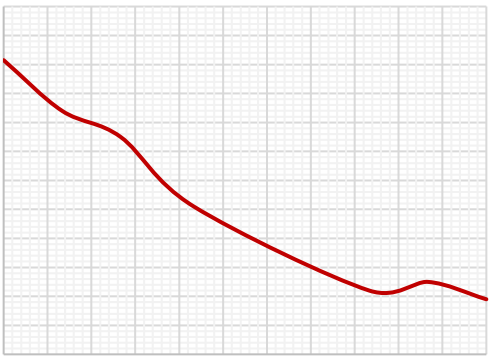
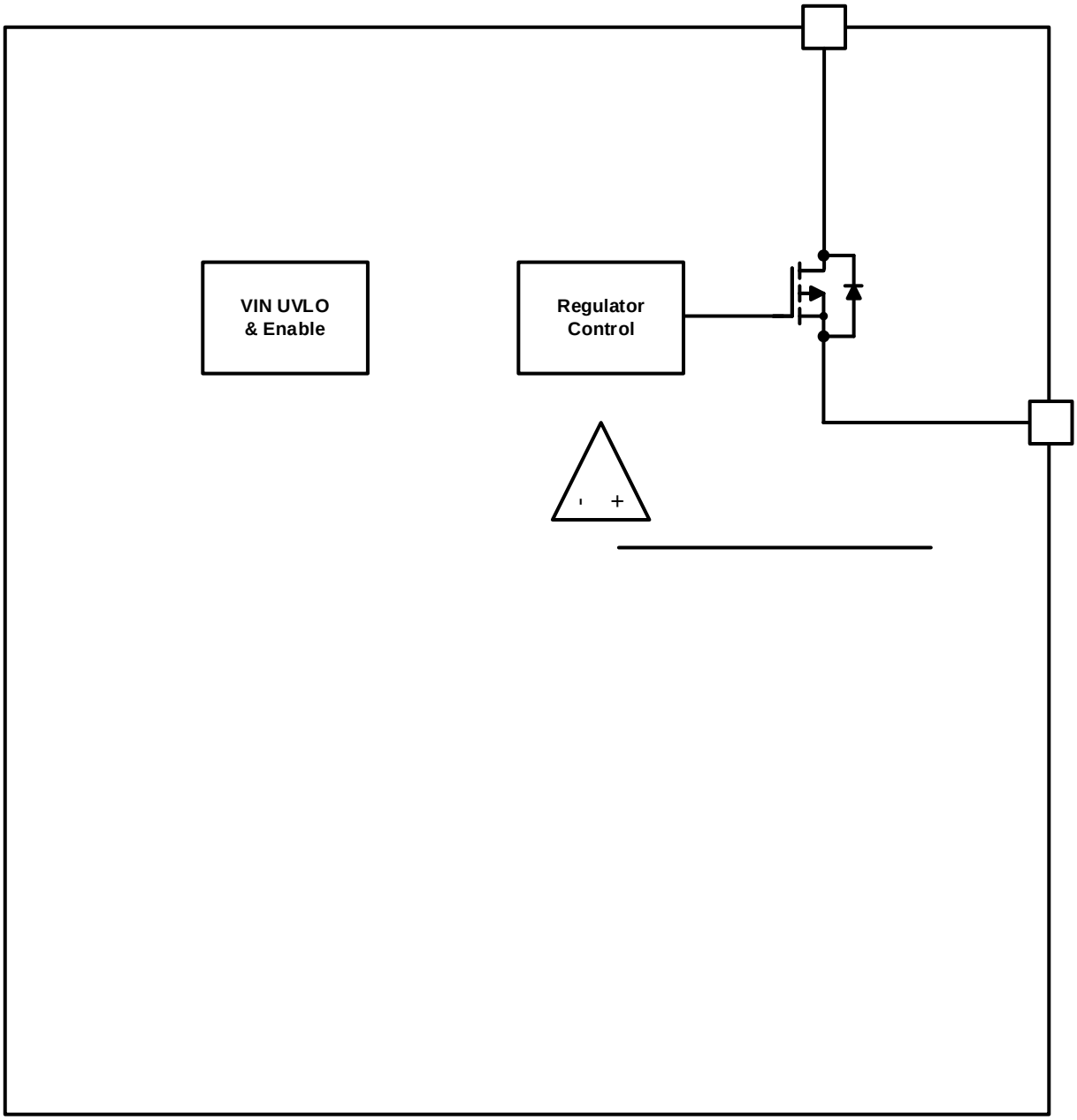


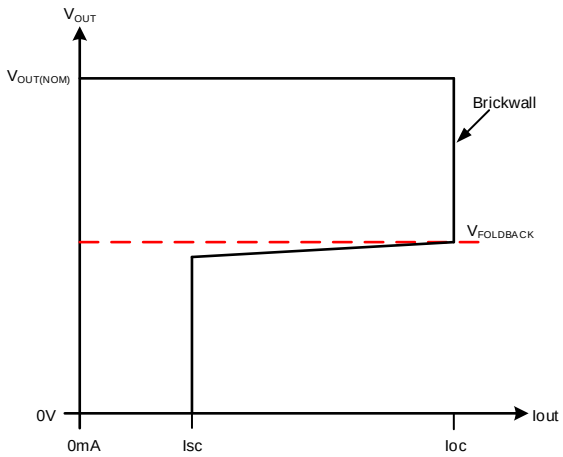
Figure 8. Shutdown Current vs Ambient Temperature

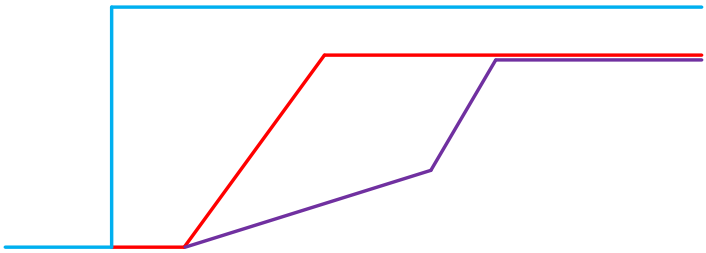
Figure 9. Output Current Limit vs Ambient Temperature

Figure 10. Short Current Limit vs Ambient Temperature

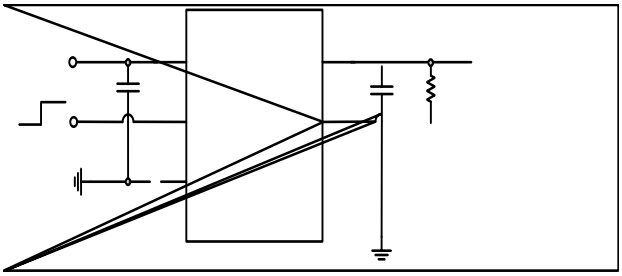

VIN UVLO
& Enable
Regulator
Control

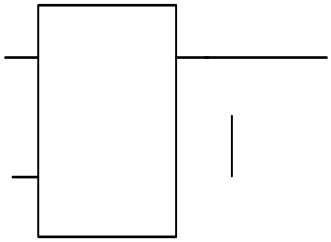
The SCT71005Q product provide adjustable output which can adjust the output voltage from 0.5V to 5V.

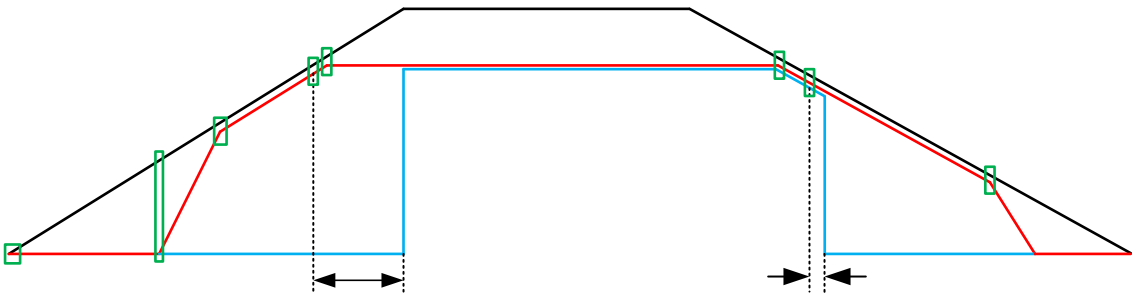

V_{OUT}
$V_{OUT(NOM)}$
Brickwall
$V_{FOLDBACK}$
0V
0mA
Isc
Ioc
Iout

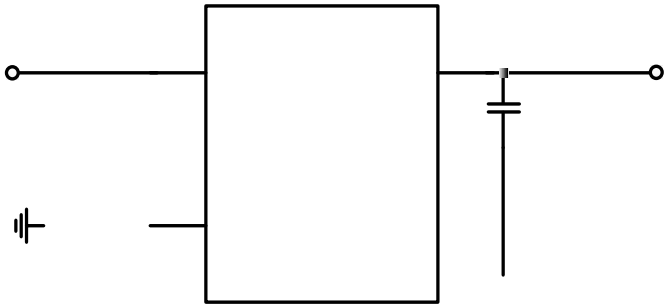


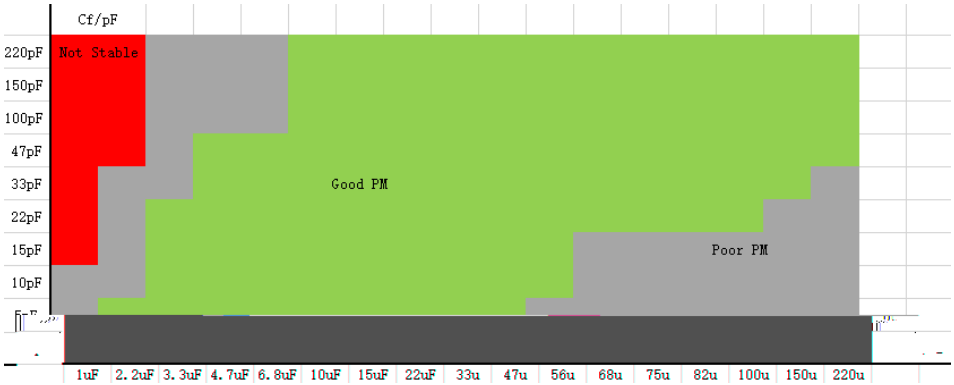
≥

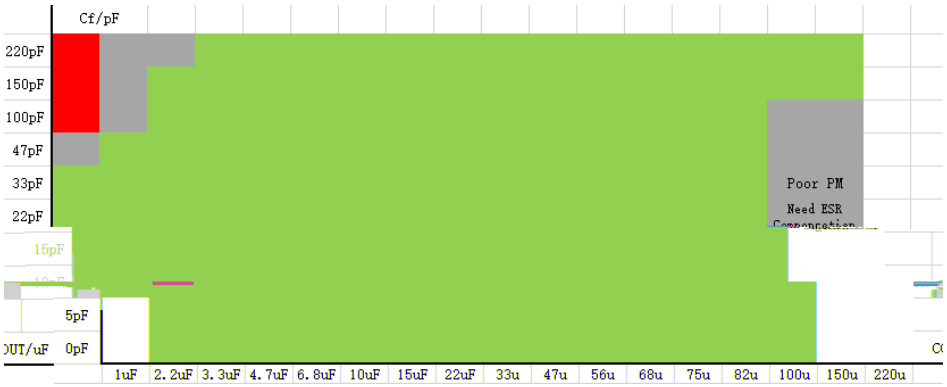


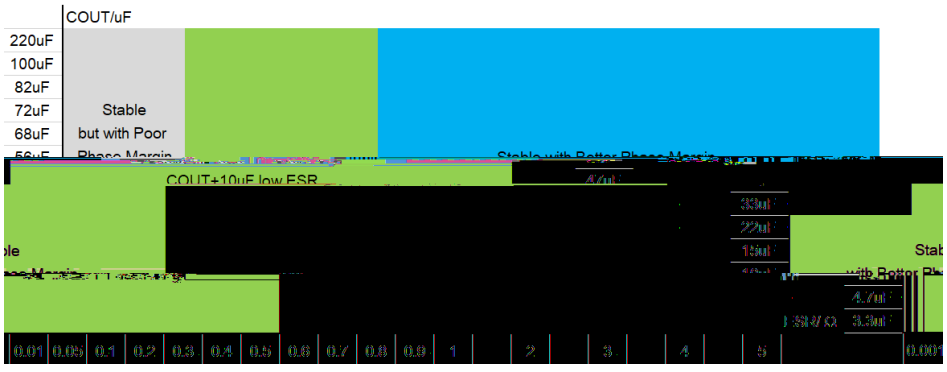


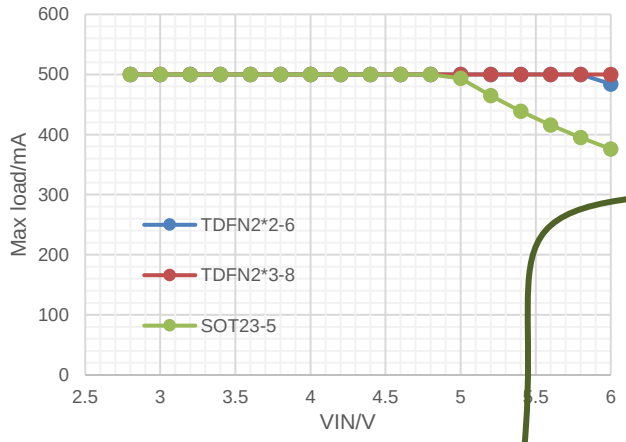


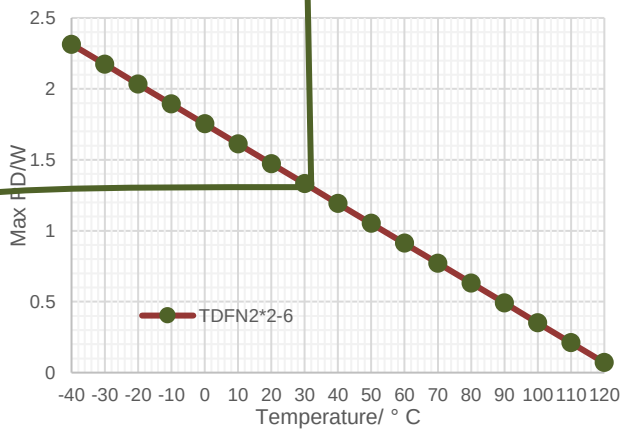


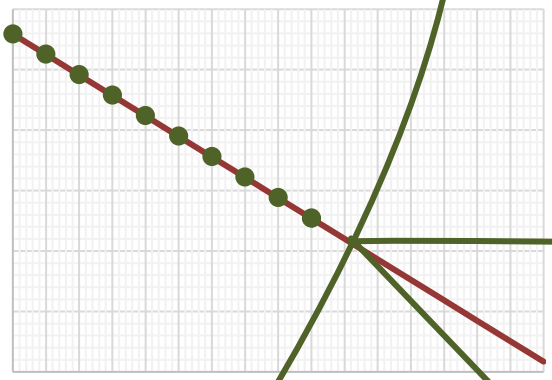

Cf/pF
220pF
150pF
100pF
47pF
33pF
22pF
15pF
10pF
Not Stable
Good PM
Poor PM
1uF
2.2uF
3.3uF
4.7uF
6.8uF
10uF
15uF
22uF
33u
47u
56u
68u
75u
82u
100u
150u
220u

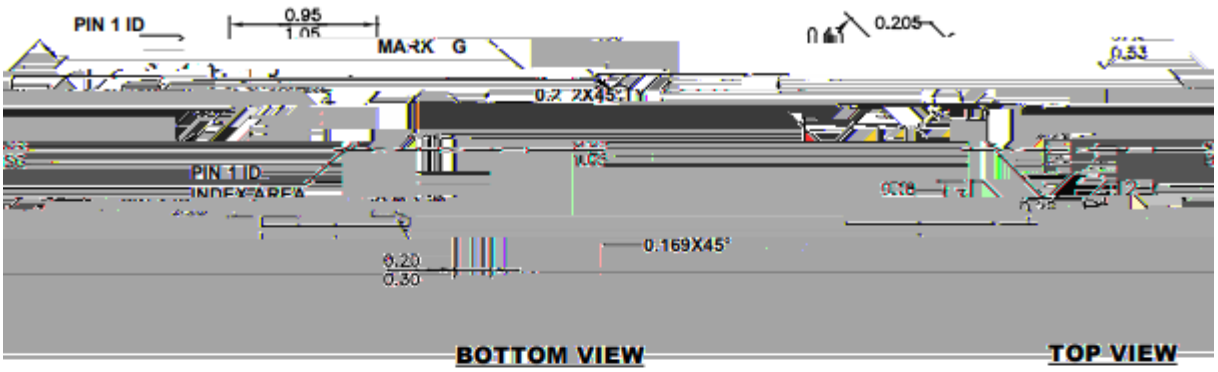

Cf/pF
220pF
150pF
100pF
47pF
33pF
22pF
15pF
5pF
0pF
Poor PM
Need ESR
1uF
2.2uF
3.3uF
4.7uF
6.8uF
10uF
15uF
22uF
33u
47u
56u
68u
75u
82u
100u
150u
220u


COUT/uF
220uF
100uF
82uF
72uF
68uF
Stable
but with Poor
0.01
0.05
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
2
3
4
5

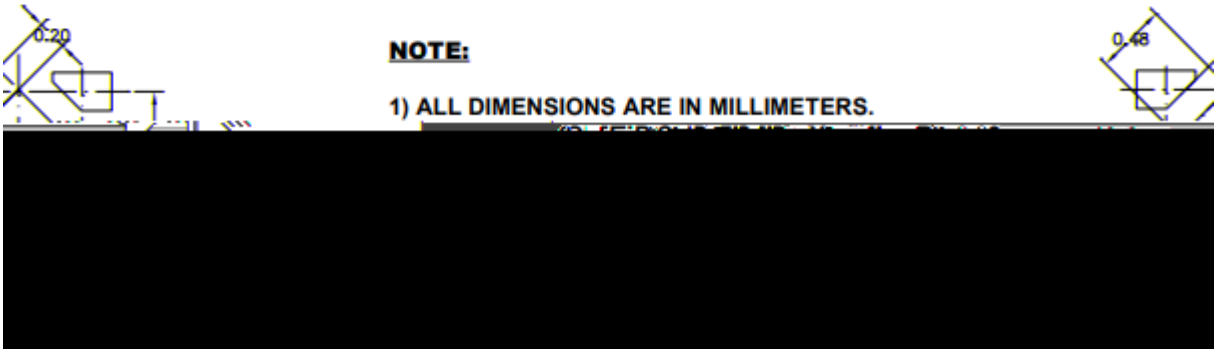

600
500
400
300
200
100
0
Max load/mA
TDFN2*2-6
TDFN2*3-8
SOT23-5
2.5
3
3.5
4
4.5
5
5.5
6
VIN/V


2.5
2
1.5
1
0.5
0
Max PD/W
TDFN2*2-6
-40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120
Temperature/ ° C



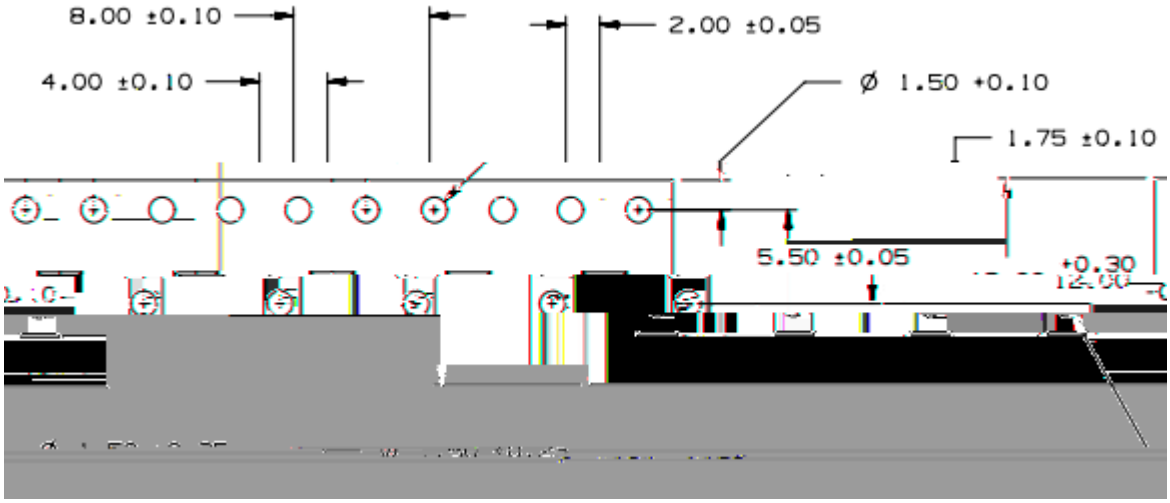

PIN 1 ID
0.95
1.05
MARK G
0.205
0.53
0.2 2X45°TY
PIN 1 ID
INDEX AREA
0.169X45°
0.20
0.30
BOTTOM VIEW
TOP VIEW

0.32
0.00
0.05


0.20
NOTE:
1) ALL DIMENSIONS ARE IN MILLIMETERS.
0.48

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

注意：
1. 材料：聚苯乙烯；
4. 表面电阻：10E5~10E11
OHMS/SQ以下


8.00 ±0.10
4.00 ±0.10
2.00 ±0.05
Ø 1.50 +0.10
1.75 ±0.10
5.50 ±0.05
+0.30