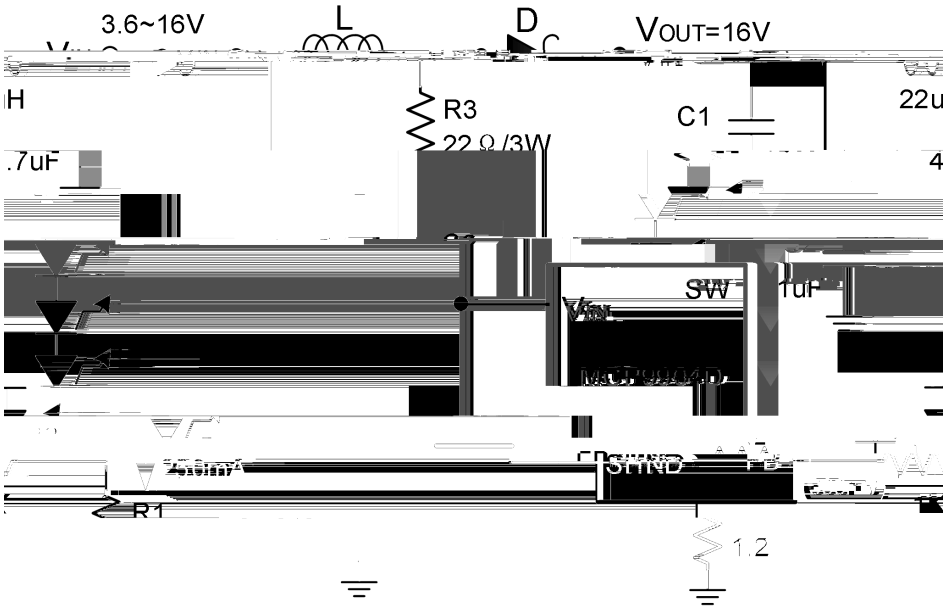
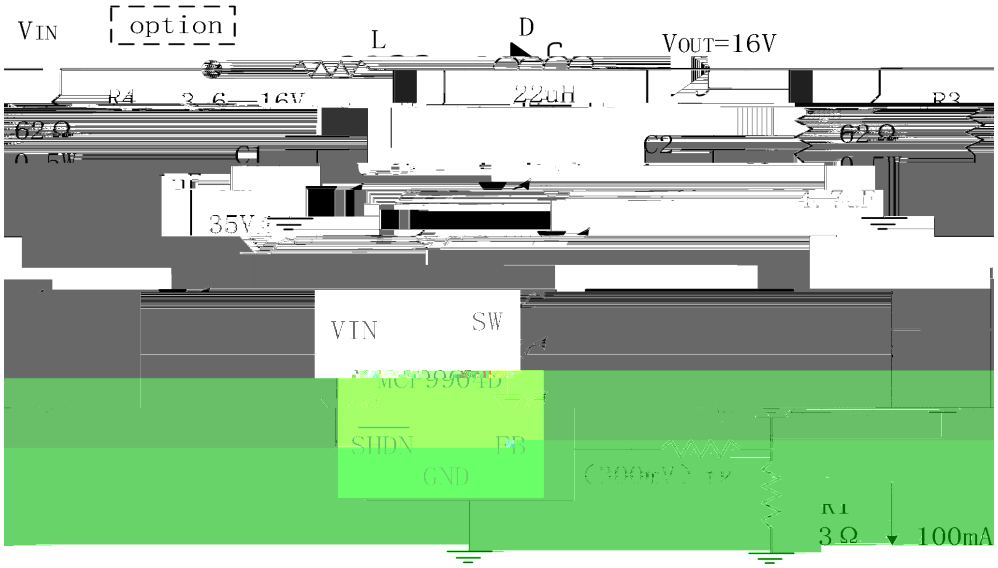
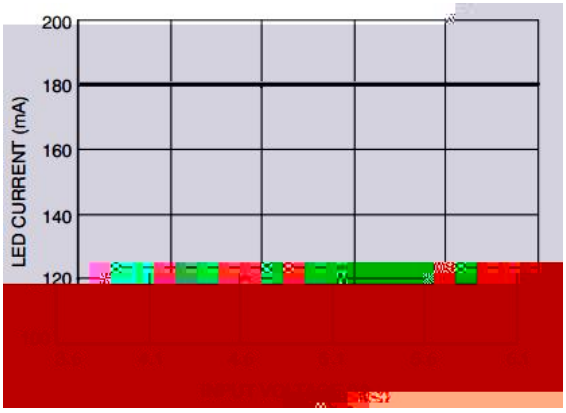
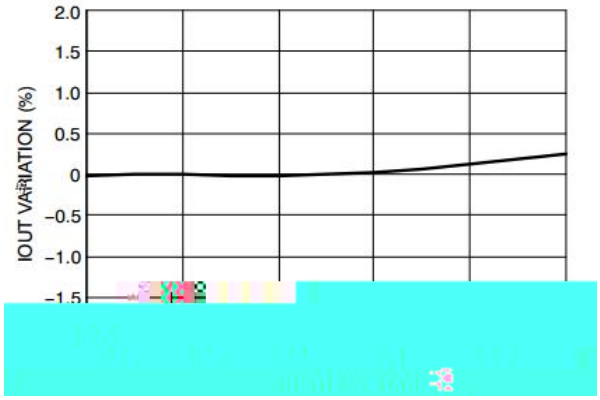
3.1

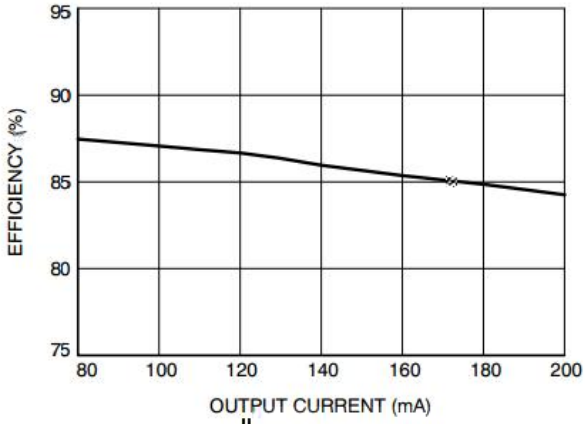

3.6~16V
L
D
VOUT=16V
R3
C1
22u
SW
1uF
GND
R1
1.2

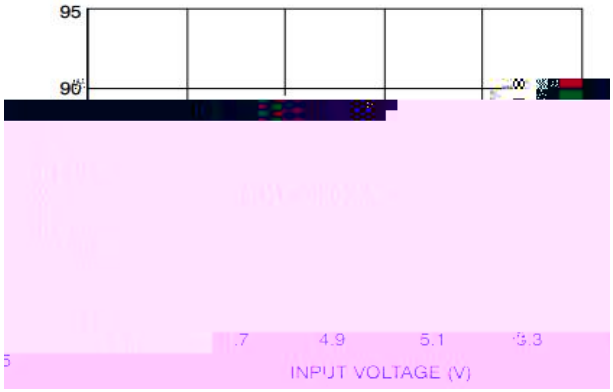

VIN
option
L
D
VOUT=16V
22uH
62Ω
C1
C2
35V
VIN
SW
SHDN
FB
GND
R1
3Ω
100mA

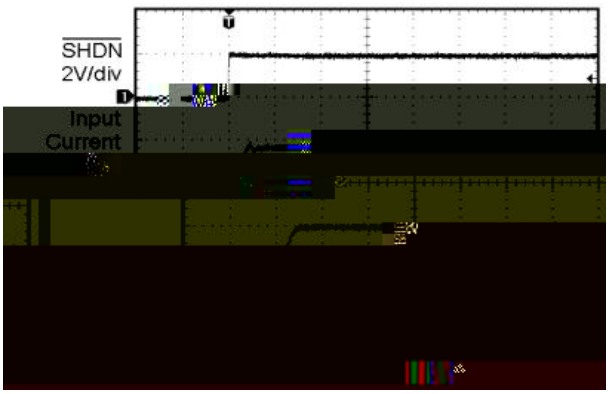


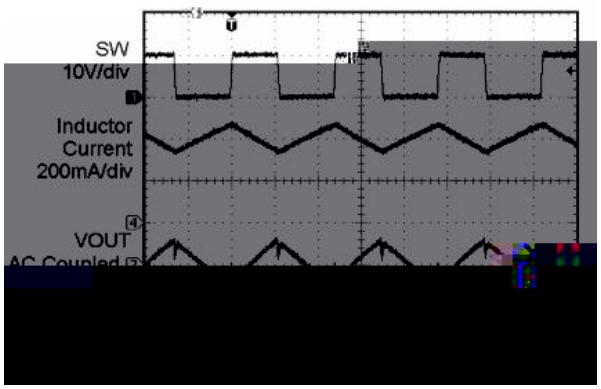

LED CURRENT (mA)
200
180
160
140
120

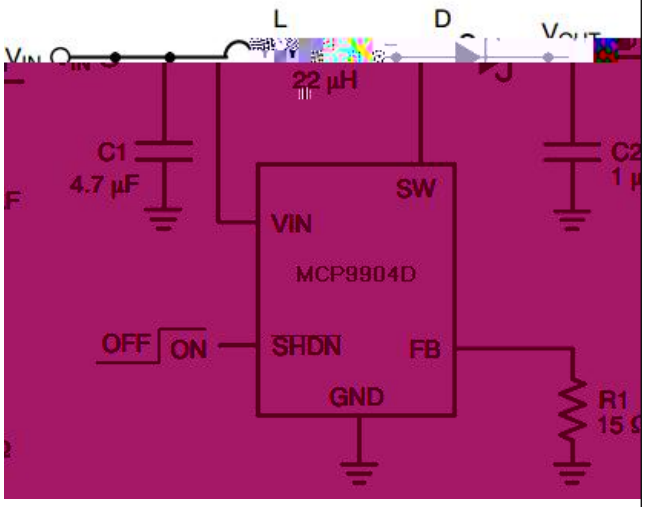

IOUT VARIATION (%)
2.0
1.5
1.0
0.5
0
−0.5
−1.0
−1.5

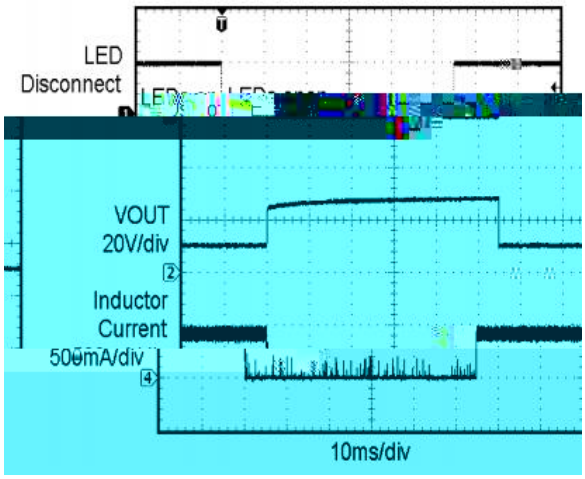

EFFICIENCY (%)
95
90
85
80
75
80
100
120
140
160
180
200
OUTPUT CURRENT (mA)

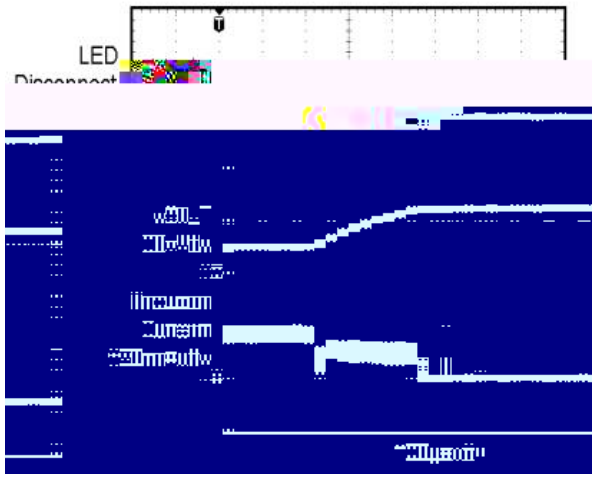

95
90
4.9
5.1
INPUT VOLTAGE (V)

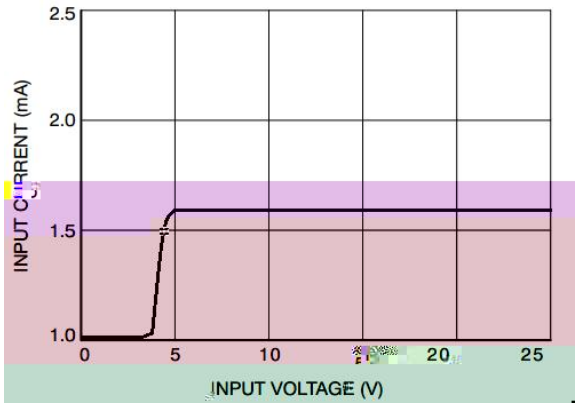

SHDN
2V/div
Input
Current

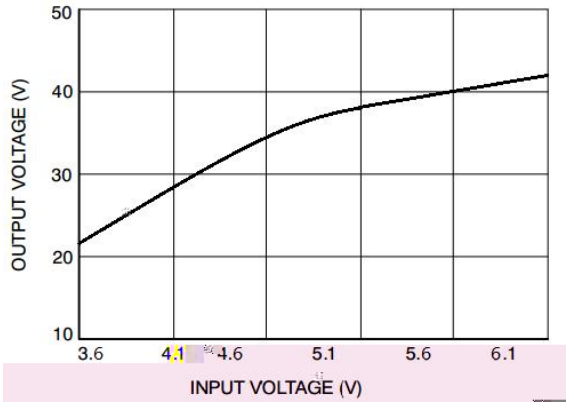

SW
10V/div
Inductor
Current
200mA/div
VOUT

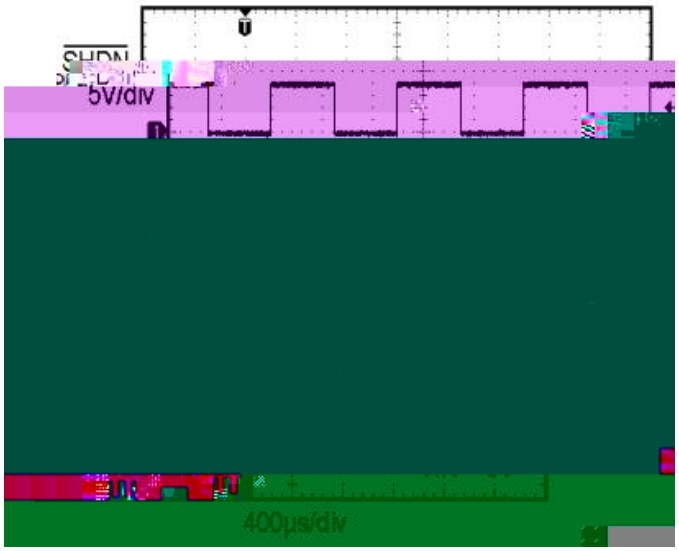

L
D
22 µH
C1
4.7 µF
SW
VIN
MCP9904D
OFF
ON
SHDN
FB
GND
R1

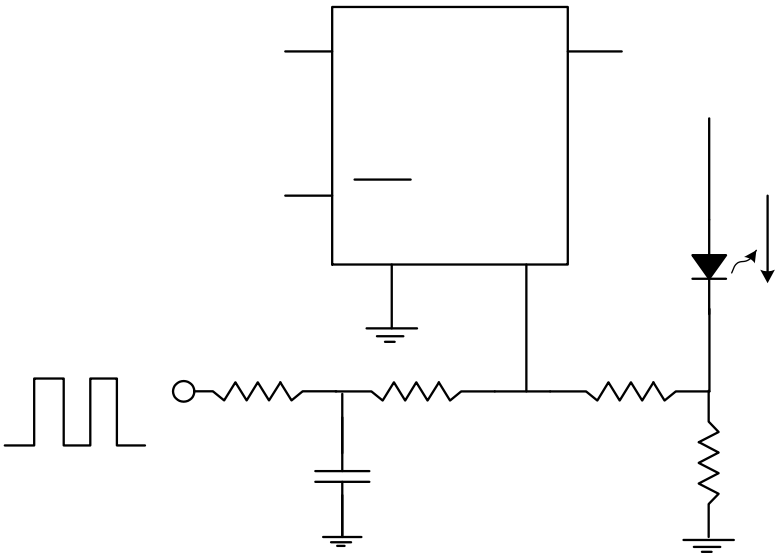

LED
Disconnect
VOUT
20V/div
Inductor
Current
50mA/div
10ms/div

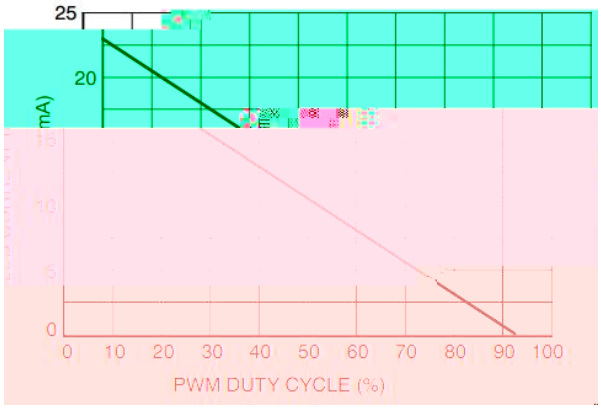

LED

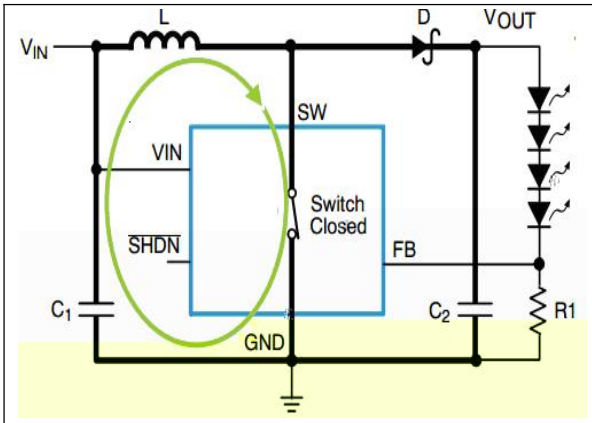

2.5
2.0
1.5
1.0
0
5
10
20
25
INPUT VOLTAGE (V)

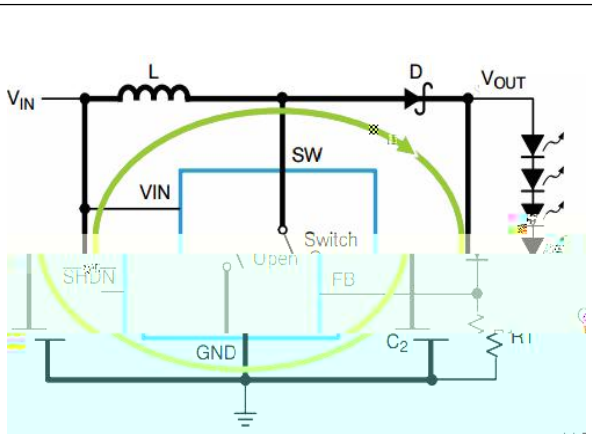

50
40
30
20
10
OUTPUT VOLTAGE (V)
3.6
4.1
4.6
5.1
5.6
6.1
INPUT VOLTAGE (V)

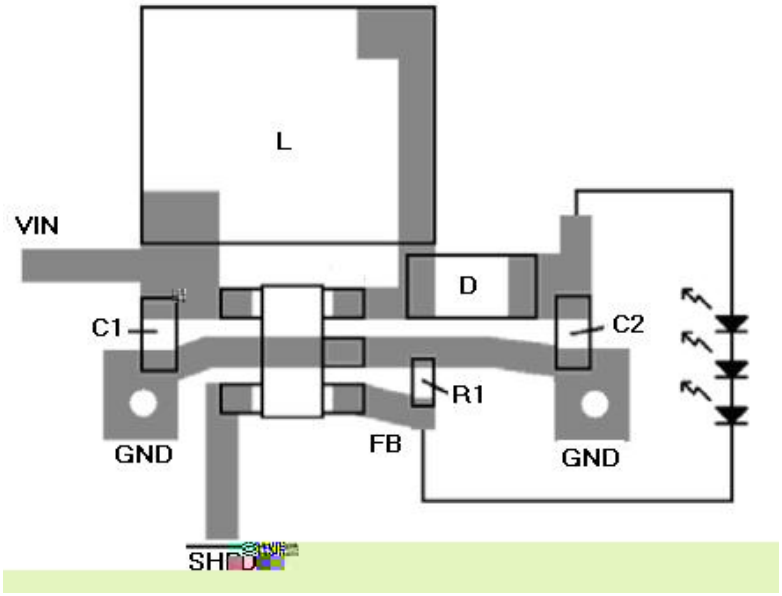

5V/div
400µs/div

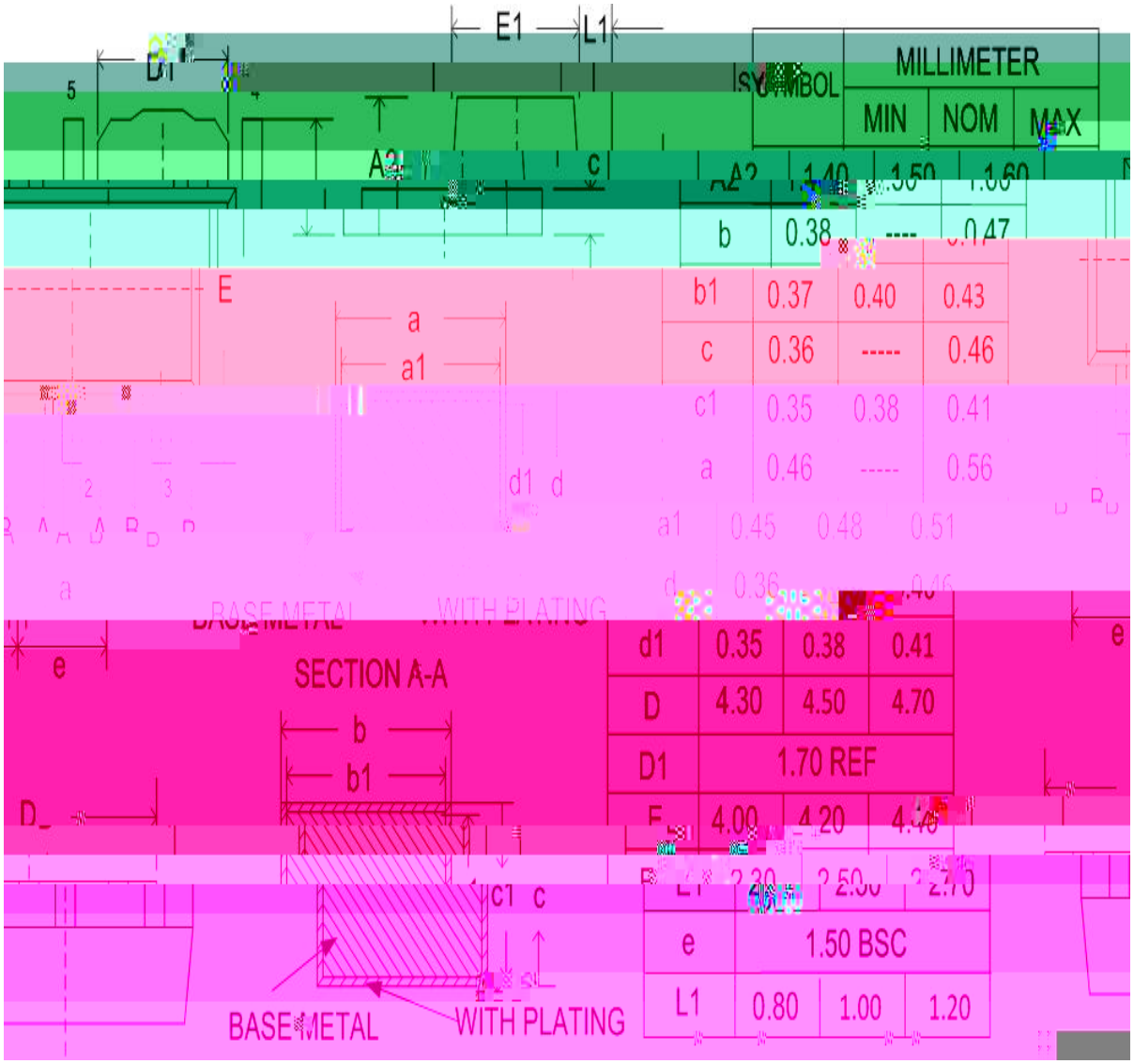



25
20
mA)
0
0 10 20 30 40 50 60 70 80 90 100
PWM DUTY CYCLE (%)


L
D
VOUT
VIN
SW
VIN
Switch
Closed
SHDN
FB
C1
C2
R1
GND


L
D
VOUT
VIN
SW
VIN
Switch
SHDN
FB
GND
C2


L
VIN
D
C1
C2
R1
FB
GND
GND


E1
L1
D1
5
A2
c
E
a
a1
d1
d
e
SECTION A-A
b
b1
c1
c
BASE METAL
WITH PLATING
SYMBOL
MILLIMETER
MIN
NOM
MAX
A2 1.40 1.50 1.60
b 0.38 ---- 0.47
b1 0.37 0.40 0.43
c 0.36 ----- 0.46
c1 0.35 0.38 0.41
a 0.46 ----- 0.56
a1 0.45 0.48 0.51
d1 0.35 0.38 0.41
D 4.30 4.50 4.70
D1 1.70 REF
e 1.50 BSC
L1 0.80 1.00 1.20
