BST6040L——

BST6040L

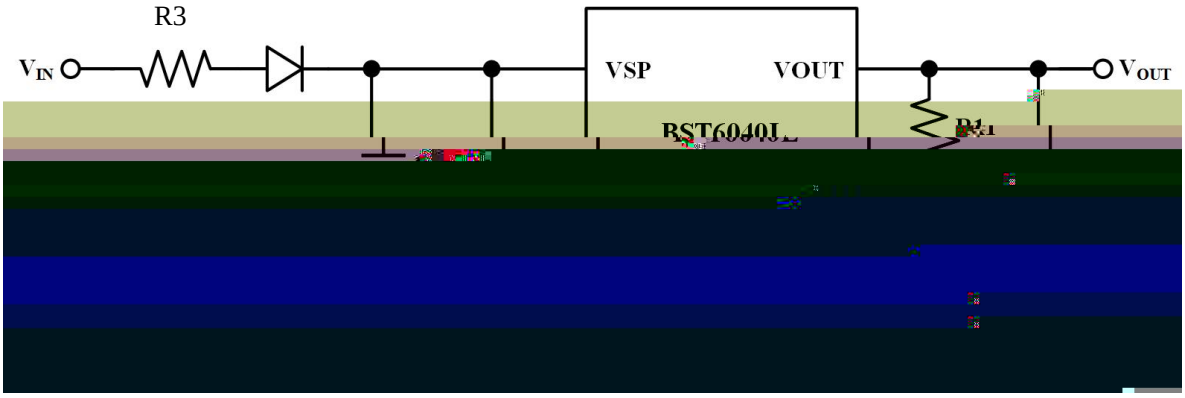
400mA ESOP8 MCU

BST6040L

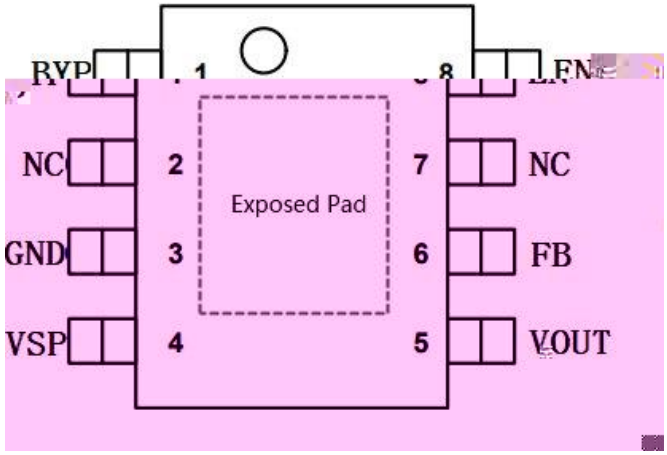
3.0V< V_{SP} <60V 1% V_{out}

1.0V

- 3V 60V
- 4.5μA
- 400mA
- ≤ 1%
-
-
-
- AEC-Q100
- RoHS
-
- MCU
-
-



1 BST6040L

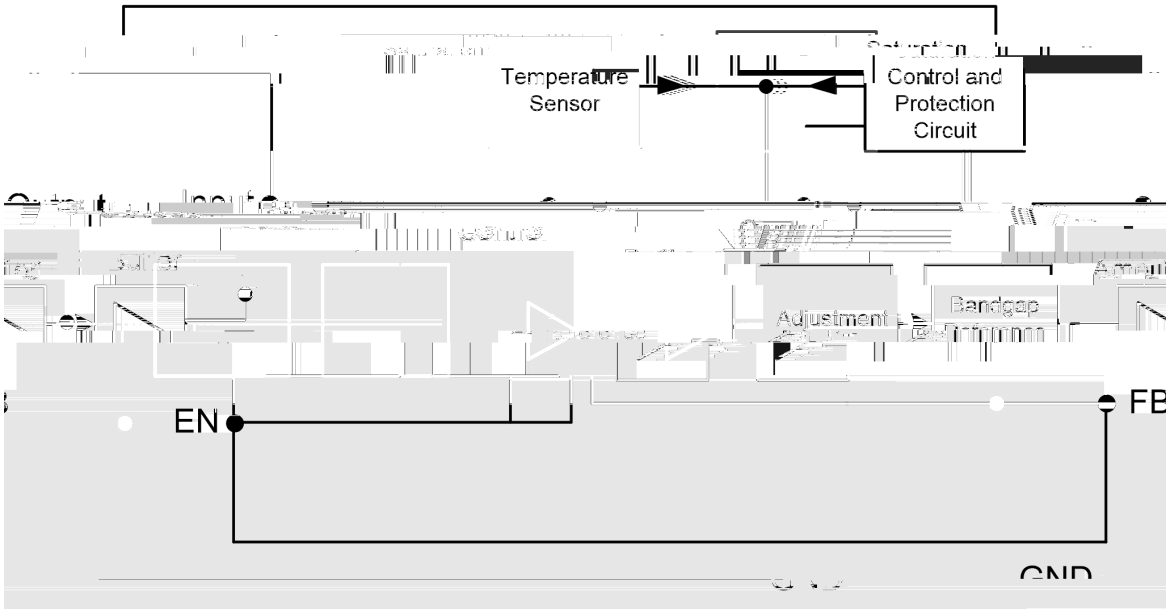


2

1

BYP	1	BYP 0.1nF~10nF
NC	2	
GND	3	
VSP	4	
VOUT	5	
FB	6	
NC	7	
EN	8	
Exposed Pad		GND

MOS



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[redacted]

V_{SP} = 13.5V T_A = 25

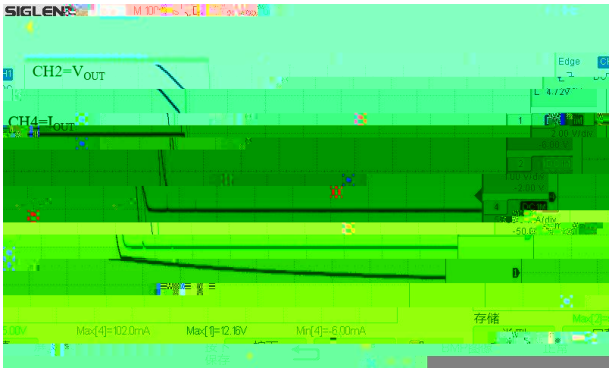
	V_{SP}		3		60	V
	V_{OUT}	1mA<I_{OUT}<150mA 5V<V_{SP}<60V	FB=1.0V			V
	ΔV_{LNR}	12V<V_{SP}<40V V_{OUT} = 5V I_{OUT} = 100mA		0.5	1	mV/V
	ΔV_{LDR}	V_{SP} = 12V V_{OUT} = 5V I_{OUT} = 100mA~500mA		0.05	0.2	V/A
		I_{OUT} = 100mA		500	650	mV
[5]	V_{dr}	I_{OUT} = 200mA		750	850	mV
		I_{OUT} = 800mA		1.8	2.0	V
	I_{Q1}			150	200	μA
	I_{Q2}	I_{OUT} = 100mA		300	350	uA
	I_{SHDN}	V_{EN} = 0V I_{OUT} = 0mA		4.5	10	μA
	I_{OUT}	V_{SP} = 8V V_{OUT} = 5V	0		1.2	A
	I_{LIM}			1.3		A
	PSRR	f = 100Hz V_r				

T_A=25

V_{SP}=12V V_{OUT}=5V I_{OUT}=100mA

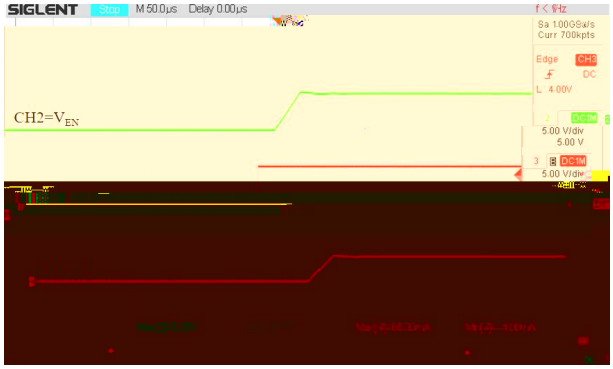


V_{SP}=12V V_{OUT}=5V I_{OUT}=100mA



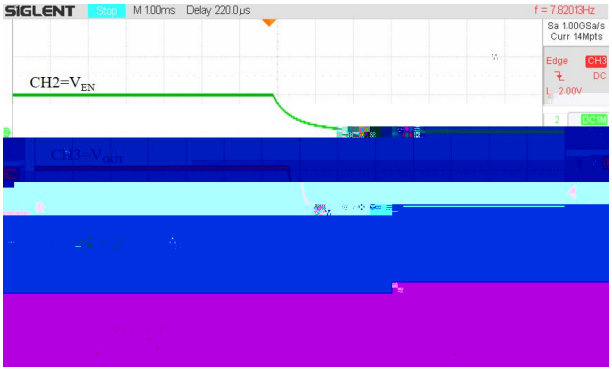
EN

V_{SP}=12V V_{OUT}=5V I_{OUT}=70mA

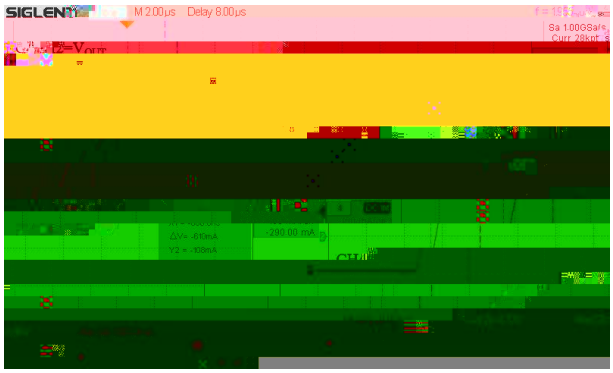


EN

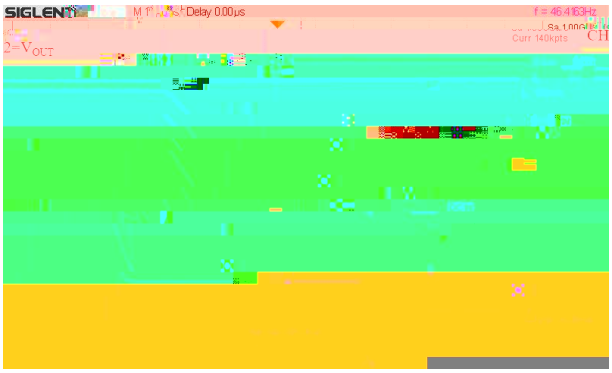
V_{SP}=12V V_{OUT}=5V I_{OUT}=70mA



V_{SP}=8V V_{OUT}=5V I_{OUT} 0mA~500mA



V_{IN}=8V V_{OUT}=5V I_{OUT} 500mA~0mA



ÄV_{SP}=13.5V V_{OUT}=5V I_{OUT} ,100mA~ o2

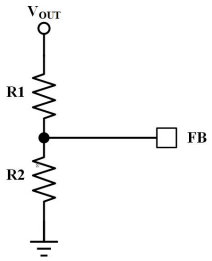
R_1 R_2

R_1 R_2 R_1

R_2 1%

10kΩ 10MΩ

$$R_2 = R_1 \frac{1.0V}{V_{OUT} - 1.0V}$$



C_{IN}

2Ω R_3

100nF C_1 1Ω

470uF C_3

C_{OUT}

BST6040L 1uF ESR 4R

BST6040L	ESOP8	4000/Tape & Reel