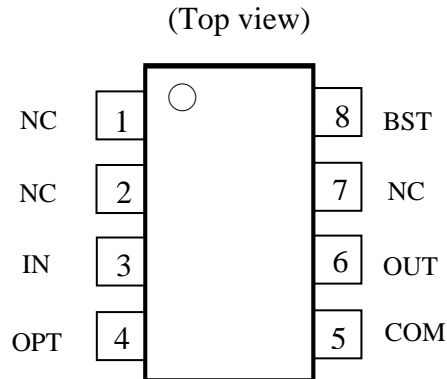




Pin descriptions



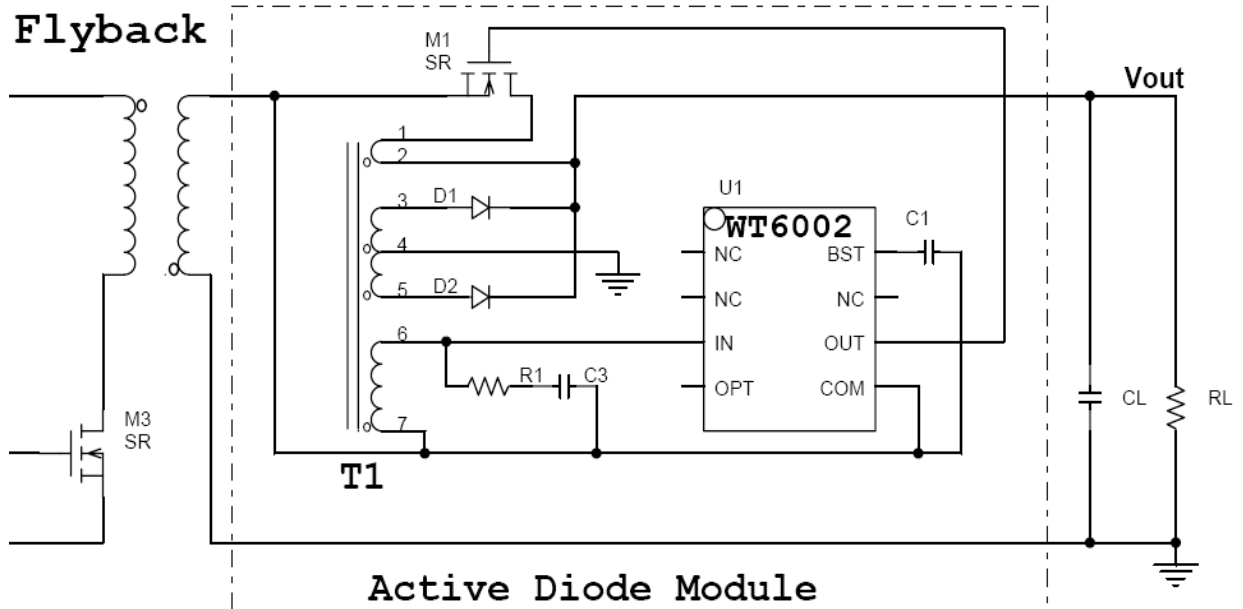
Pin	Symbol	Description
3	IN	IC input. When IN is high, OUT is high.
4	OPT	If necessary, a capacitor (recommend 100pf) can be connected from OPT to COM to filter out input noise.
5	COM	Common reference pin.
6	OUT	IC output pin. Provide gate driving voltage for the freewheeling MOSFET.
8	BST	A 220nf capacitor should be connected from BST to COM.

Application circuit

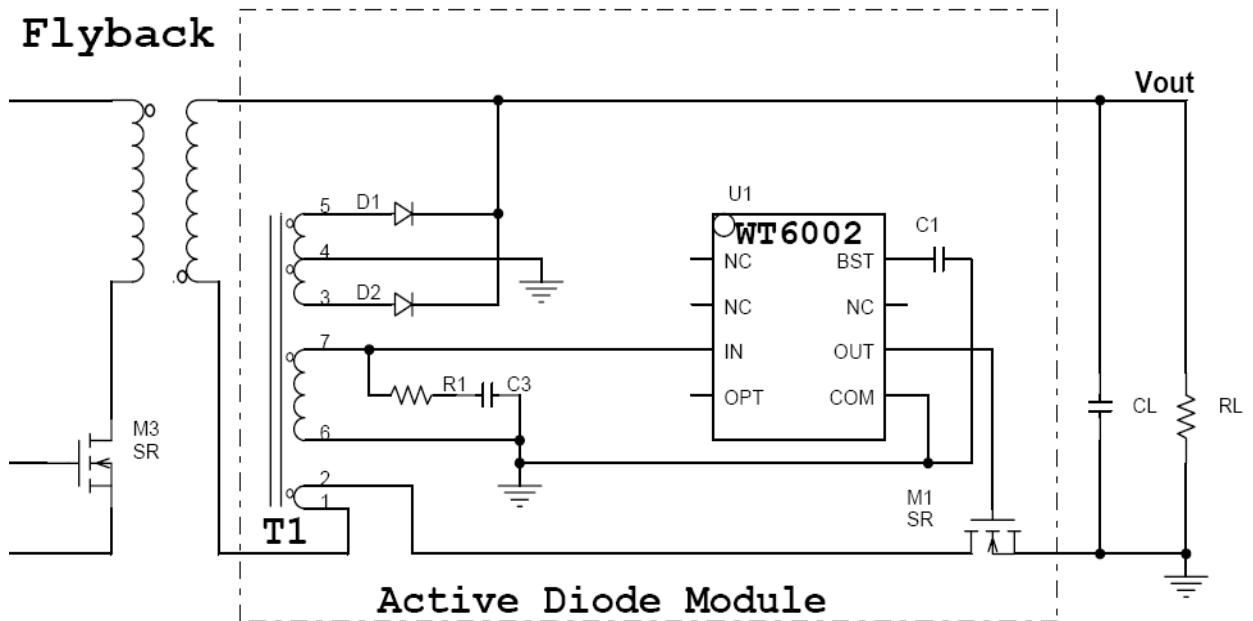
There is an external small toroid transformer used to sense current and provide driving signal for WT6002 chip.



I. SR in high side



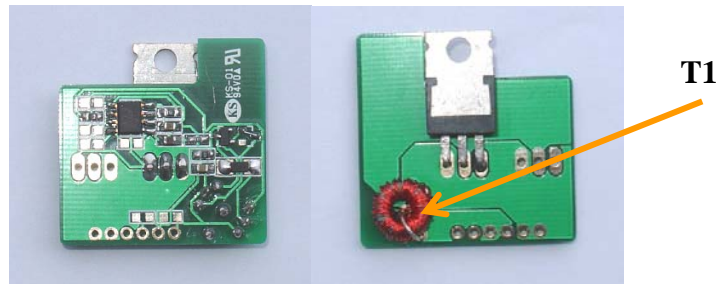
II. SR in low side





Top View

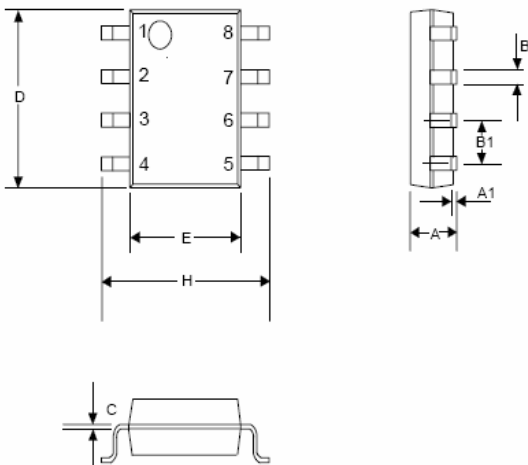
Bottom View



The Active Diode Module

Item	Description	Part number
T ₁	Toroid transformer	
	W1 : 1 turn (coupling coeff K 0.9 – 1)	
	W2 : 20 turns	
	W3 : 20 turns	
	W4 : 20 turns	
M ₁	Wide variety of Power MOSFET	IRF4710
D ₁	Small signal diode	BAS16
D ₂	Schottky diode	SD1004
C ₁	Capacitor, 220nF	
C ₃	Capacitor, 3.3nF	
R ₁	510ohm, adjustable if necessary	

Outline Drawing SOP-8



DIM ^N	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.0578	0.0681	1.47	1.73
A1	0.0040	0.0087	0.10	0.22
B	0.0138	0.0197	0.35	0.50
B1	0.050 BSC		1.27 BSC	
C	0.0071	0.0098	0.18	0.25
D	0.1897	0.1940	4.82	4.93
H	0.2299	0.2417	5.84	6.14
E	0.1500	0.1559	3.81	3.96