Circuit brief

TA6586 Is a DC Two-way motor drive circuit, it is suitable for toys and other motor drive, automatic valve motor drive,

electromagnetic door lock drive, etc. It has two logic input terminals to control the motor forward,

Back up and brake. The circuit has good anti-interference, small standby current, low output internal resistance, and

At the same time, he also has a built-in diode to release the reverse inrush current of the inductive load.

Features

l Tiny standby current, less than 2uA .

l Wide operating voltage range 3.0V~14V..

l Has emergency stop function

l With overheat protection function

l With overcurrent embedded current and short circuit protection function

l The package shape is: DIP8

Pin function

Foot position	name	Features
1	BI	Back input
2	FI	Forward input
3	GND	Ground
4	Vcc	power supply
5, 6	FO	Forward output
7, 8	BO	Backward output

Input truth table

2 Foot forward input	1 Foot back input	5,6 Foot forward output	7,8 Foot back output
H	L	H	L
L	H	L	H
H	H	L	L
L	L	Open	Open

Limit value

| parameter	symbol	Value	unit
voltage	Vcc	15	V
Output current	Iout	9	A
Operating temperature	Top	-25~+85	°C
storage temperature	Tstg	-55~+150	°C

Electrical characteristics (except for special Outside the Ming: Vc c = 6V , Ta = 25 ℃)

parameter	symbol	condition	The smallest	typical	maximum	unit
Operating Voltage	V OPR		3.0	--	14	V
stand-by current	Is	Vcc = 9V Vi = 0			2	uA
Quiescent Current	Icc	Vcc = 6V V1 = 3V Open load	2	4	7	mA
Output high level	VH OUT	Vcc = 6V Io =3A	5.5	5.7	5.9	V
Output low level	VL OUT	Vcc = 6V Io = 3A	0.05	0.12	0.3	V
Input high level	ViH		2.2	3.5	6	V
Input low level	ViL			0.5	0.7	V
Input Current(2V)	Ii	Vcc = 6V Vi = 2V Vcc = 6V Vi = 3V		70	100	uA
Input Current(3V)	Ii	DIP8 Package, 5,6,7,8 Outside the feet		100	150	uA
Output current	Iout	Copper heat sink (PCB Plate copper)		5	7	A
Overheat protection temperature	Totp			130		°C

Application circuit
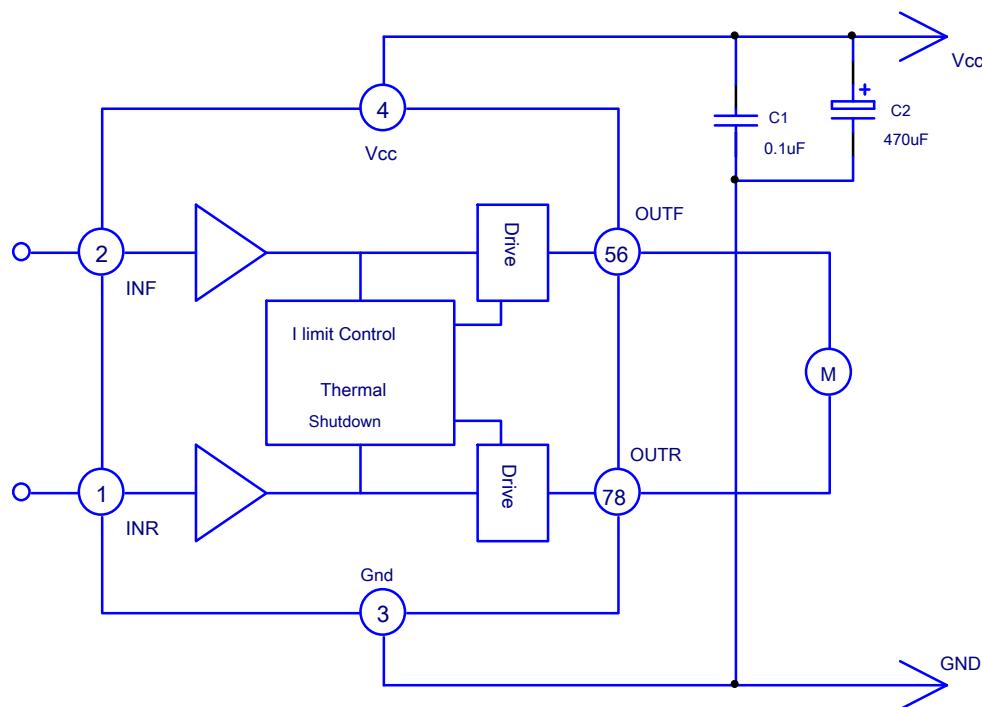
Application test template
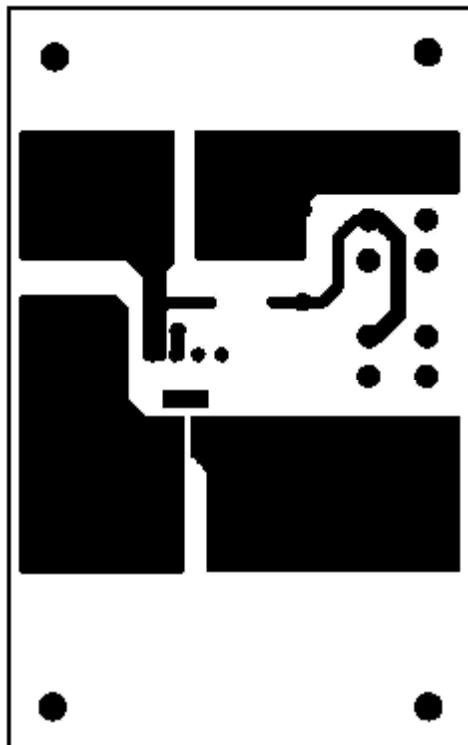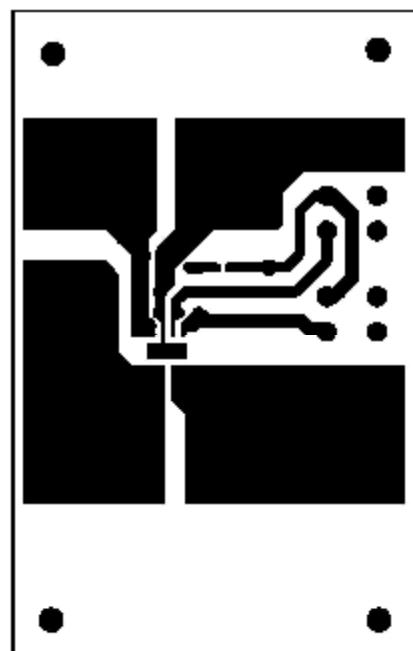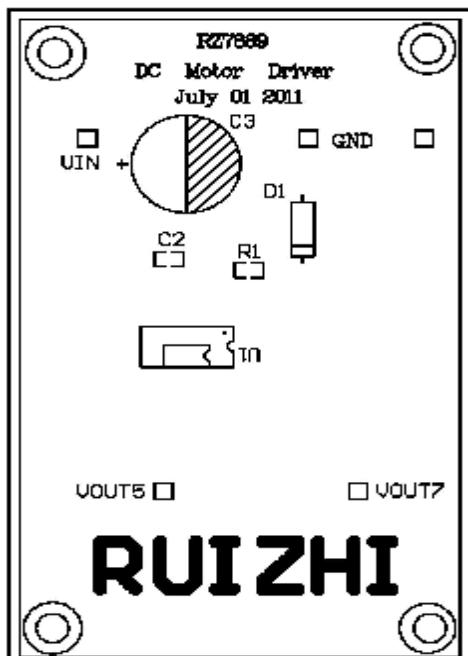
Package outline drawing

Package Type DIP8

SECTION Z-Z

BASE METAL

1PIN INDEX

NOTES:
ALL DIMENSIONS MEET JEDEC STANDARD MS-001 BA
DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS.

DP6

COMMON DIMENSIONS
(UNITS OF MEASURE=MILLIMETER)

SYMBOL	MIN	NOM	MAX
A	–	–	4.80
A1	0.50	–	–
A2	3.10	3.30	3.50
A3	1.40	1.50	1.60
b	0.38	–	0.55
b1	0.38	0.46	0.51
b2	1.47	1.52	1.57
b3	0.89	0.99	1.09
c	0.2°	–	0.35
c1	0.20	0.25	0.30
D	9.10	9.20	9.30
D1	0.13	–	–
E	7.62	7.87	8.25
E1	6.25	6.35	6.45
e		2.54BSC	
eA		7.62BSC	
eB	7.62	8.50	10.90
eC	0	–	1.52
L	2.92	3.30	3.81