Circuit Description

TA6586 Is a DC Bidirectional motor driving circuit, it applies to other types of motor-driven toys, motor-driven automatic valve, electromagnetic locks drives. It has two input terminals of the logic used to control the motor forward, reverse and brake. The circuit has a good resistance, a slight standby current, low output resistance, at the same time, he also has a built-in diode reverse impact releasable inductive load current.

Feature

l Slight standby current is less than 2uA .

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

l Emergency stop function

l Overheating protection function

l There are over-current and short circuit protection features embedded flow

l Package outline is: DIP8

Pin Function

Pin	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	Back Output

Input truth table

2 foot Forward input	1 foot Back input 5,6 Output foot forward 7,8 Back foot output		
H	L	H	L
L	H	L	H
H	H	L	L
L	L	Open	Open

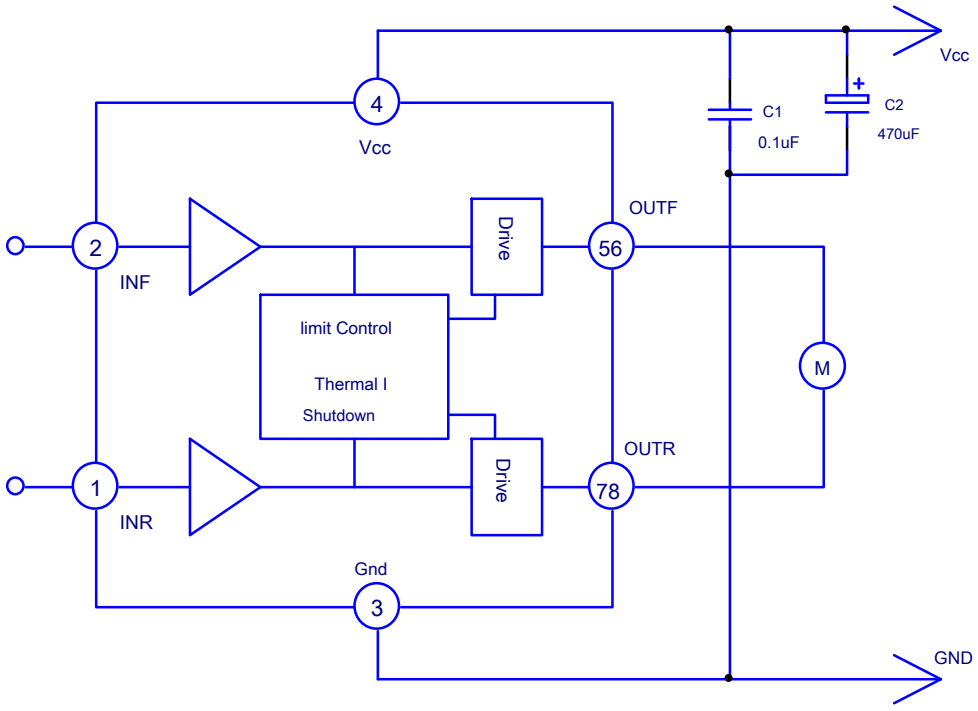
Limit

parameter	symbol	Numerical	unit
voltage	Vcc	15	V
Output current	Iout	9	A
Operating temperature	Top	--25 + 85	℃
storage temperature	Tstg	- 55 + 150	℃

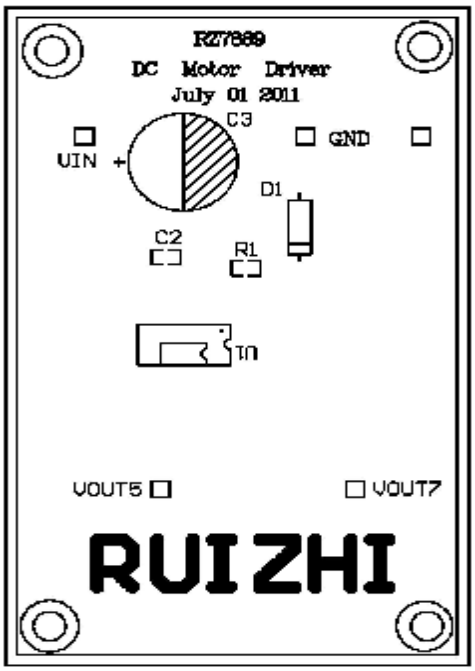
Electrical characteristics (In addition to special Say Ming outside: Vc c = 6V , Ta = 25 ℃)

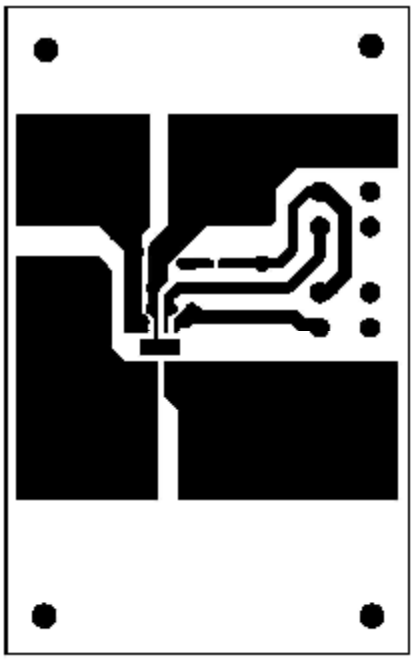
parameter	symbol	condition	Minimum	Typical	Maximum	Units
Operating Voltage	V OPR		3.0	---14		V
stand-by current	Is	Vcc = 9V Vi = 0			2	uA
Quiescent Current	Icc	Vcc = 6V V1 = 3V Open load	2	4	7	mA
Output high	VH OUT	Vcc = 6V Io = 3A	5.5	5.7	5.9 V	
Output low	VL OUT	Vcc = 6V Io = 3A	0.05	0.12	0.3 V	
Input High	ViH		2.2	3.5 6		V
Input low	ViL			0.5	0.7 V	
Input Current(2V)	Ii	Vcc = 6V Vi = 2V		70	100	uA
Input Current(3V)	Ii	Vcc = 6V Vi = 3V		100	150	uA
Output current	Iout	DIP8 Package, 5,6,7,8 To cloth outer leg Cooling copper (PCB Copper plate)		5	7	A
Overheat protection temperature	Totp			130		℃

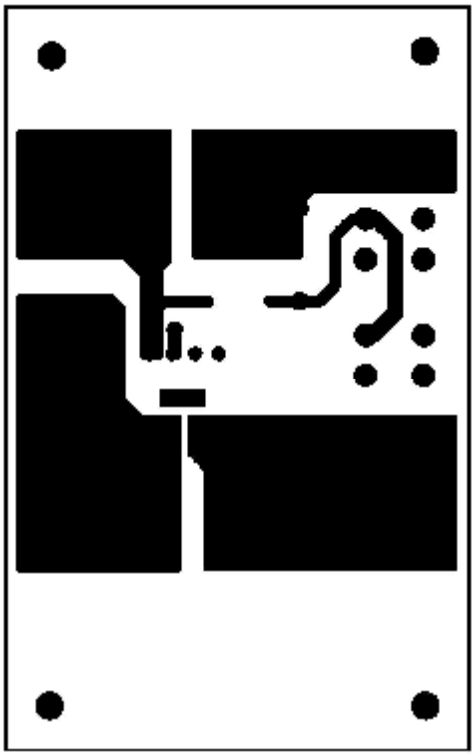
Application line



Application testing model diagram

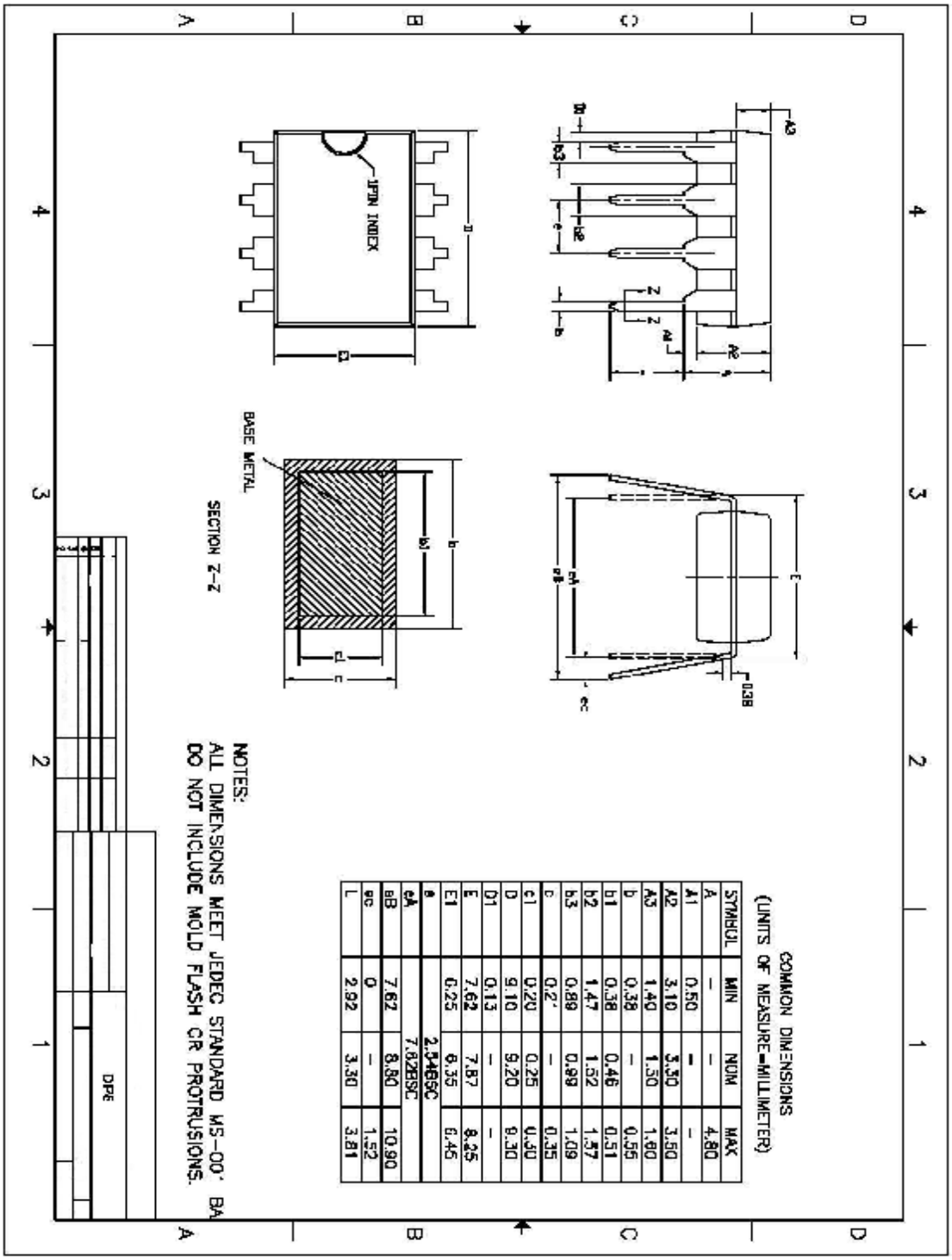






PACKAGE OUTLINE

Package Type DIP8



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	8.80	10.90
eC	0	—	1.52
L	2.92	3.30	3.81