Prolific
PROLIFIC TECHNOLOGY INC.

PT-3016x
Frequency Output
Divide 1/1.5/2

Overview

The PT3016x is a universal DC brushless motor driver IC. PT3016x is design for varies motor applications. PT3016x driver IC can use for signal coil DC and traditional double coil DC brushless motor. This driver IC accepts the hall IC input and drives the motor coil directly without any other describe transistor. Driver IC can drive the DC brushless motor to start operation at the lowest voltage of 1.5V, but this IC can operate for a wide voltage range from 2.0V up to 6.5V. PT3016x driver IC can support large current up to 400mA

Applications

- Single coils DC brushless motor.
- Traditional double coil DC Brushless motor
- DC 1.5V~6.5V.
- **PT-3016A(Divide 1) / Four Pole fan**
- **PT-3016B(Divide 1.5) / Six Pole fan**
- **PT-3016C(Divide 2) / Eight Pole fan**

Features

- Motor lock protection
- Built-in protection circuit for transient output
- Frequency Generation output
- Low power dissipation and high driving efficiency
- Ultra-low start voltage

Input Devices

- Hall IC

Package: SOT-26

X### : PT-3016
X = A---divide 1
X = B---divide 1.5
X = C---divide 2
###---year, week code.

SYMBOLS	DIMENSIONS IN MILLIMETERS		
	MIN	NOM	MAX
A2	0.70	0.80	0.90
A1	0.00	-	0.10
A	1.00	1.10	1.30
b	0.35	0.40	0.50
C	0.10	0.15	0.25
D	2.70	2.90	3.10
E	1.60	1.80	2.00
HE	2.60	2.8	3.00
e	1.7	1.9	2.1
L	0.20	-	-
b1	0.45	0.50	0.55

Pin Description

Name	Pin	Description	Type
Vdd	5	DC power supply	P
Gnd	2	DC ground	G
O1	3	First output pin	O
O2	1	Second output pin	O
Hin	4	Hall IC signal input	I
FG	6	Tacho meter output (Frequency Generation)	O

Type Description
P: Power, G:Ground, O: Output, I: Input

Specifications
Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Conditions	Ratings	Units
Maximum supply voltage	V_{DD}^{max}		6.5	V
Allowable power dissipation	Pd		350*	mW
Operating temperature	Ta		-30 ~ +125	$^{\circ}$C
Storage temperature	Ts		-55 ~ +150	$^{\circ}$C
Output Continuous current	I_{out}	Max.	400	mA
Output Peak current	I_{out}	T≤ 20us	650	mA

＊On 50mm x 50mm x 1.6mm glass epoxy board