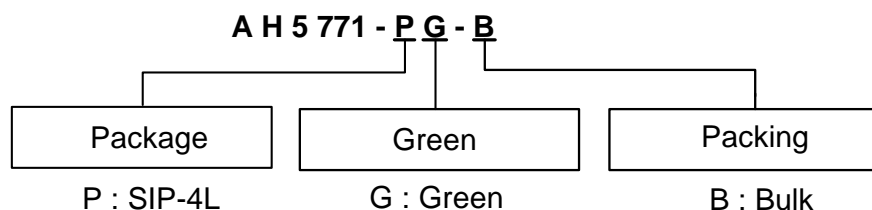



## Ordering Information

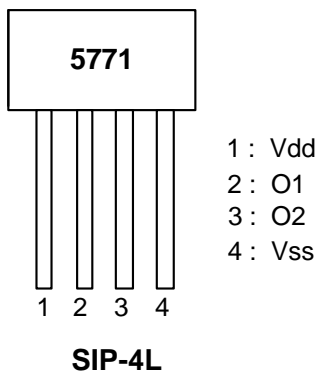


Device	Package Code	Packaging (Note 2)	Bulk	
			Quantity	Part Number Suffix
 AH5771-PG-B	P	SIP-4L	1000	-B

Notes: 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied. Please visit our website at [http://www.diodes.com/products/lead\\_free.html](http://www.diodes.com/products/lead_free.html)  
 2. Pad layout as shown on Diodes Inc. suggested pad layout document AP02001, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.

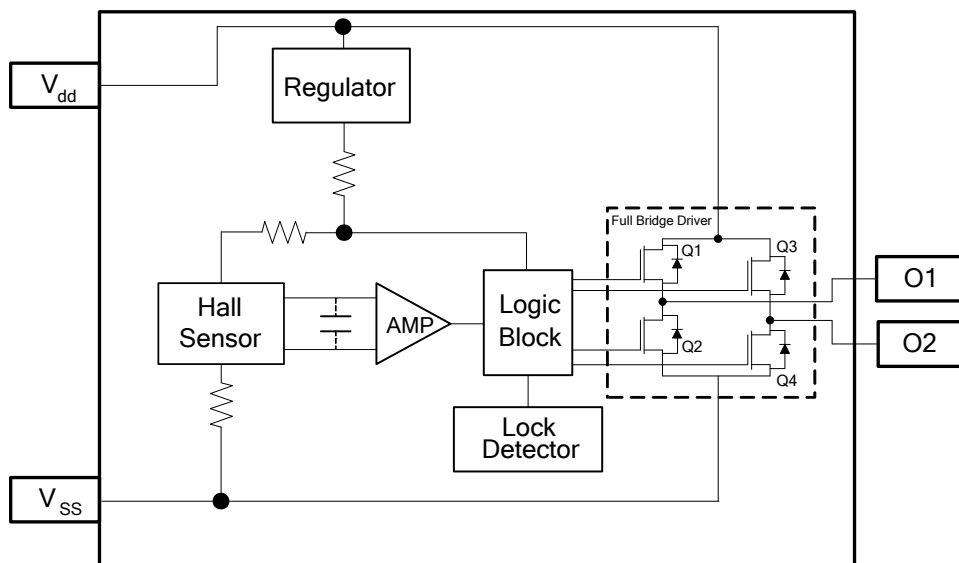
## Pin Assignment

( Top View )



## Pin Description

Pin Name	Pin No.	Description
Vdd	1	Power supply pin
O1	2	Output driving & sinking pin
O2	3	Output driving & sinking Pin
V <sub>SS</sub>	4	Ground pin

**SINGLE PHASE HALL EFFECT LATCH SMART FAN  
MOTOR CONTROLLER**
**Block Diagram**

**Absolute Maximum Ratings** (Unless otherwise noted, at  $T_A = 25^\circ\text{C}$ )

Symbol	Characteristics		Values	Unit
V <sub>dd</sub>	Supply voltage		18	V
I <sub>O</sub> (peak as hold)	Output Current (Peak as hold)		400	mA
P <sub>D</sub>	Power Dissipation	SIP-4L	550	mW
T <sub>ST</sub>	Storage Temperature Range		-55 ~ 150	°C

**Recommended Operating Conditions**

Symbol	Characteristics	Conditions	Ratings	Unit
V <sub>dd</sub>	Supply voltage	Operating	2.5~15	V
T <sub>A</sub>	Operating Temperature Range	Operating	-40 to +100	°C

**Electrical Characteristics** ( $T_A = 25^\circ\text{C}$ , V<sub>dd</sub> = 12V; unless otherwise specified)

Symbol	Characteristics	Conditions	Min	Typ.	Max	Unit
I <sub>dd</sub>	Supply Current	No Load	-	3.5	5	mA
V <sub>OH</sub>	Output Voltage High	I <sub>OUT</sub> = 200mA	11.4	-	-	V
V <sub>OL</sub>	Output Voltage Low	I <sub>OUT</sub> = 200mA	-	-	0.6	V
T <sub>ON</sub>	On Time	V <sub>dd</sub> = 12V	-	220	-	ms
R <sub>DR</sub>	Duty Ratio	T <sub>OFF</sub> / T <sub>ON</sub>	-	10	-	

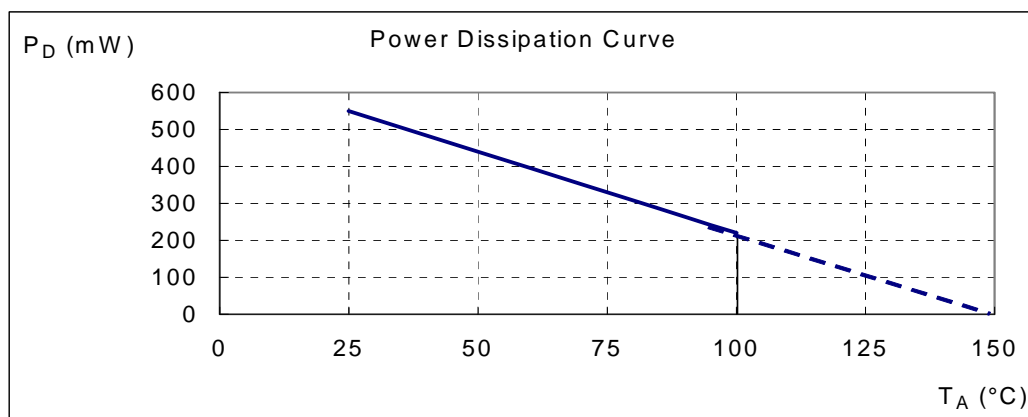
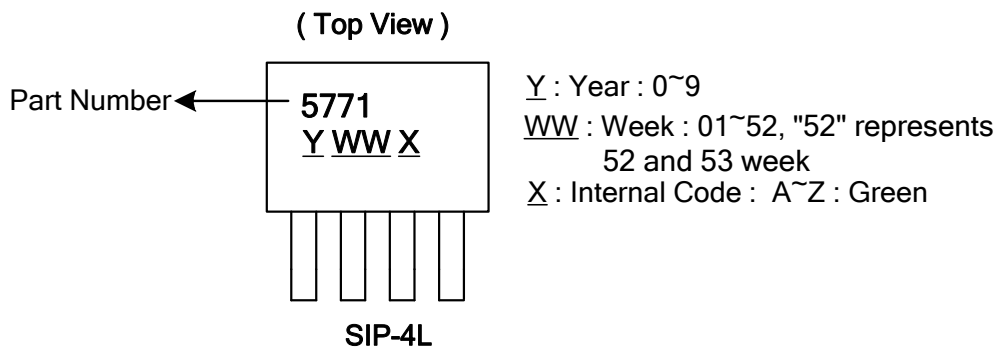
**Magnetic Characteristics** (TA=25°C, Vdd=2.5V~15V)

(1mT = 10 G)

Symbol	Characteristic	Min	Typ.	Max	Unit
B <sub>op</sub>	Operate Point	-10	30	50	G
B <sub>rp</sub>	Release Point	-50	-30	-10	G
B <sub>hy</sub>	Hysteresis	-	60	-	G

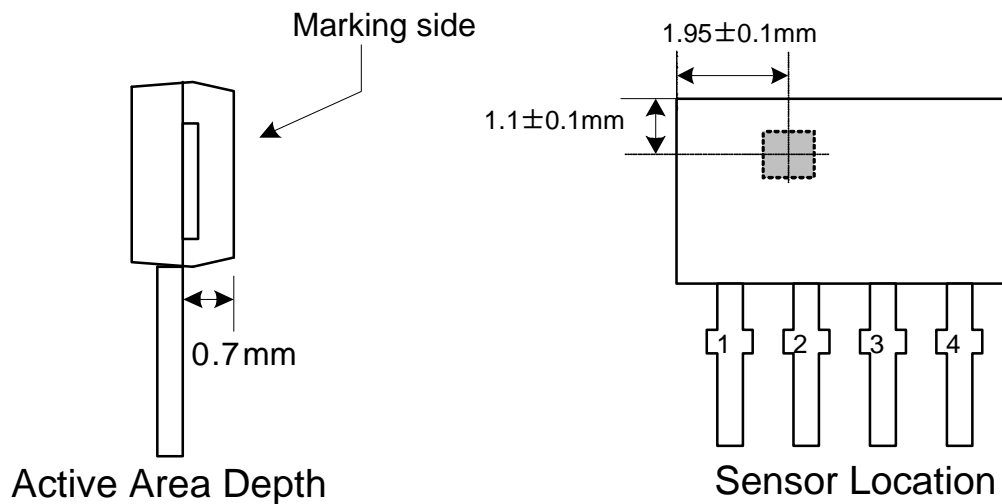
**Performance Characteristics**

T <sub>A</sub> (°C)	25	50	60	70	80	85	90	95	100
P <sub>D</sub> (mW)	550	440	396	352	308	286	264	242	220
T <sub>A</sub> (°C)	105	110	115	120	125	130	135	140	150
P <sub>D</sub> (mW)	198	176	154	132	110	88	66	44	0

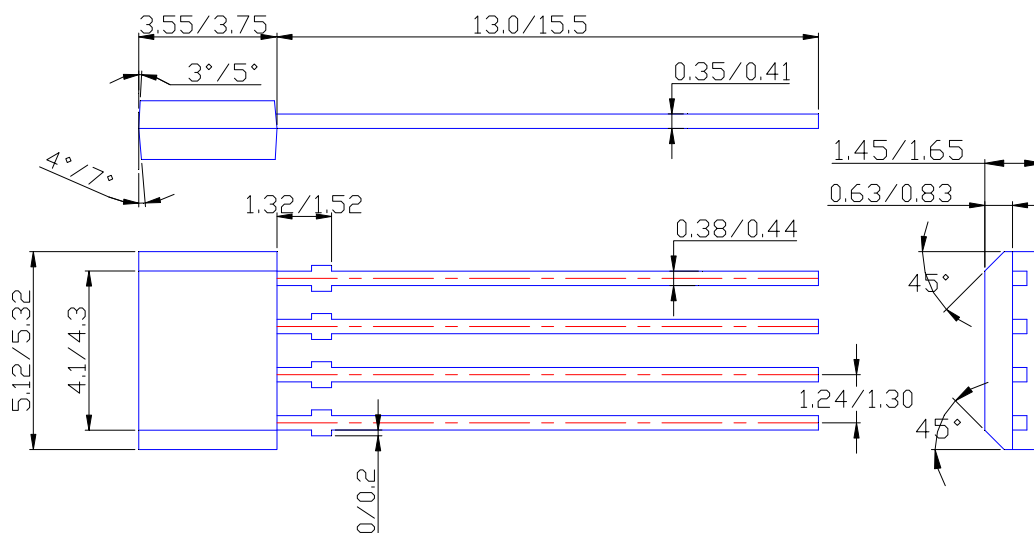

**Marking Information**


**Package Information** (All Dimensions in mm)

(1) Package type: SIP-4L



**Package Dimension**



**SINGLE PHASE HALL EFFECT LATCH SMART FAN  
MOTOR CONTROLLER****IMPORTANT NOTICE**

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