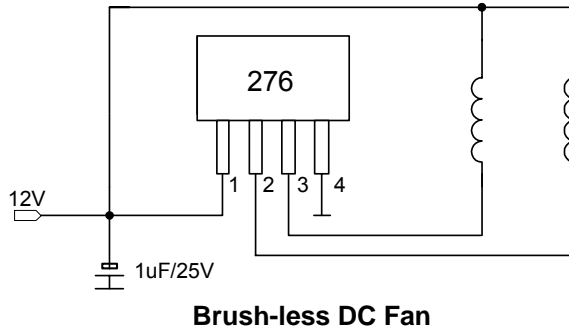
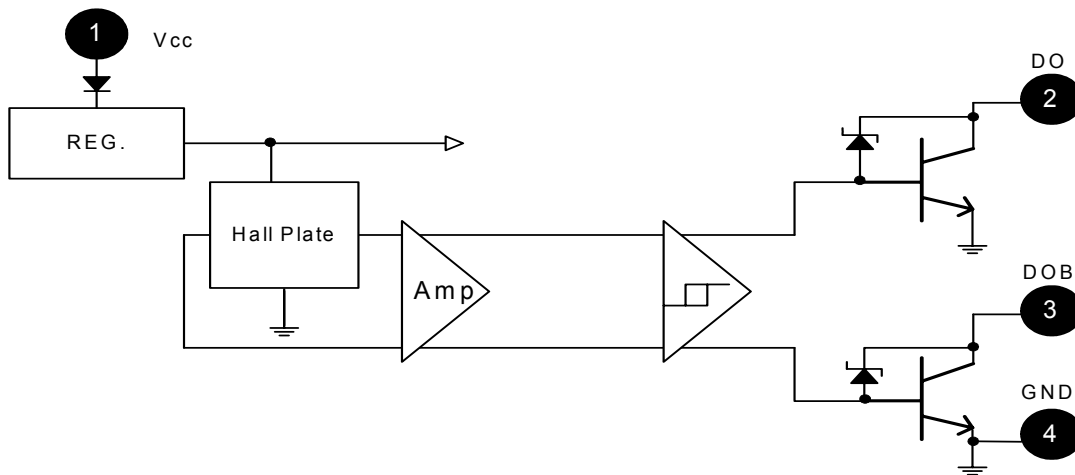


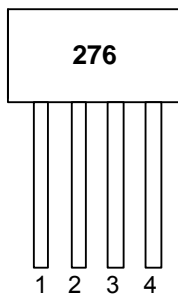
Typical Application Circuit



Block Diagram



Pin Assignment



Front View

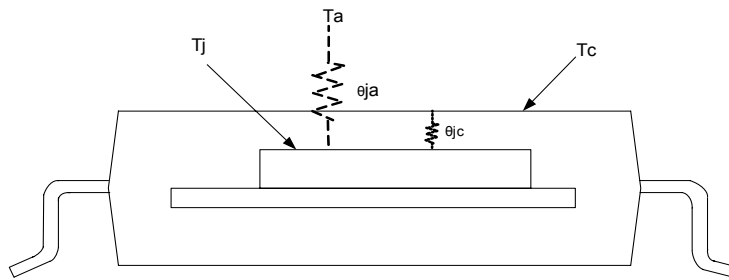
- 1 : Vcc
- 2 : DO
- 3 : DOB
- 4 : GND

Name	P/I/O	Pin #	Description
Vcc	P	1	Power Supply Input
DO	O	2	Output Pin
DOB	O	3	Output Pin
GND	P	4	Ground

Absolute Maximum Ratings (@ TA=25°C)

Characteristics	Symbol	Rating	Unit
Supply voltage	V _{CC}	20	V
Reverse V _{CC} Polarity Voltage	V _{RCC}	-20	V
Magnetic flux density	B	Unlimited	
Output "on" current*	Continuous	0.4	A
	Hold	0.5	
	Peak (Start Up)	0.7	
Operating temperature range	T _A	-20~+85	°C
Storage temperature range	T _s	-65~+150	°C
Package Power Dissipation (SIP-4)	P _D	550	mW
Maximum Junction Temp	T _j	150	°C
Thermal Resistance (SIP-4)	θ _{jc}	227	°C/W

*Note: 4. P_d shall be within Safety Operation Area.



Electrical Characteristics (TA=+25°C)

Characteristic	Symbol	Conditions	Min	Typ	Max	Units
Supply Voltage	V _{cc}	(Note 5)	3.5	-	20	V
Output Zener Breakdown	V _z	(Note 6)	-	35	-	V
Output Saturation Voltage	V _{ce(sat)}	V _{cc} =14V, I _L =400mA	-	0.6	0.9	V
Output Leakage Current	I _{ceX}	V _{ce} =14V, V _{cc} =14V	-	<0.1	10	μA
Supply Current	I _{cc}	V _{cc} =20V, Output Open	7	16	25	mA

Note: 5. The output DO/DOB is switching as magnetic field change (S>300G, N<-300G).
6. V_z is a typical value for design reference. V_z will vary with different coils design.

Magnetic Characteristics ($T_A=+25^{\circ}\text{C}$, $V_{CC}=14\text{V}$, Note 7)

A grade

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Operate Point	Bop	10	-	50	Gauss
Release Point	Brp	-50	-	-10	Gauss
Hysteresis	Bhy	-	75	-	Gauss

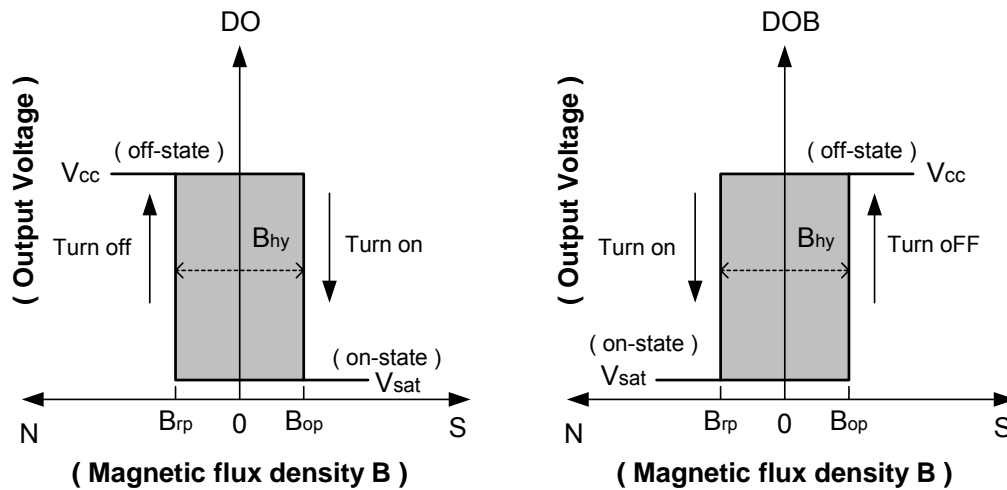
B grade

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Operate Point	Bop	5	-	70	Gauss
Release Point	Brp	-70	-	-5	Gauss
Hysteresis	Bhy	-	75	-	Gauss

C grade

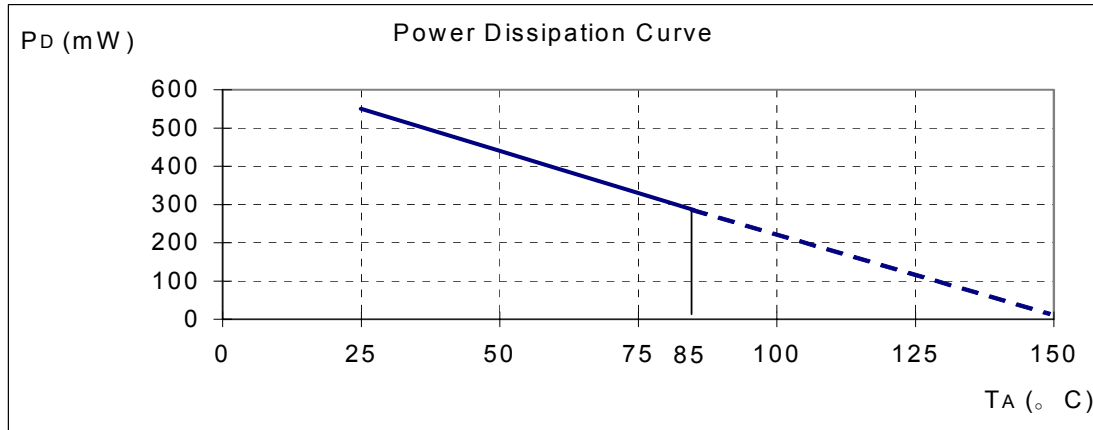
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Operate Point	Bop	-	-	100	Gauss
Release Point	Brp	-100	-	-	Gauss
Hysteresis	Bhy	-	75	-	Gauss

Note: 7. Magnetic characteristics are for design information, which will vary with supply voltage, operating temperature and after soldering.

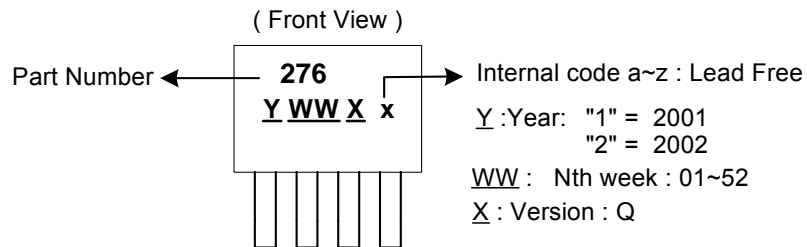


Performance Characteristics (SIP-4L)

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

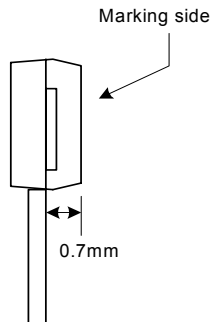


Marking Information

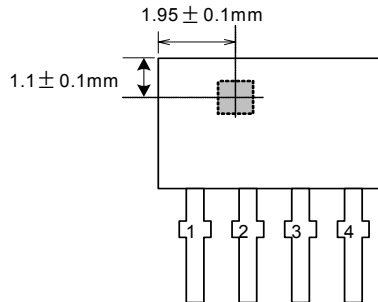


Sensor Location (unit: mm)

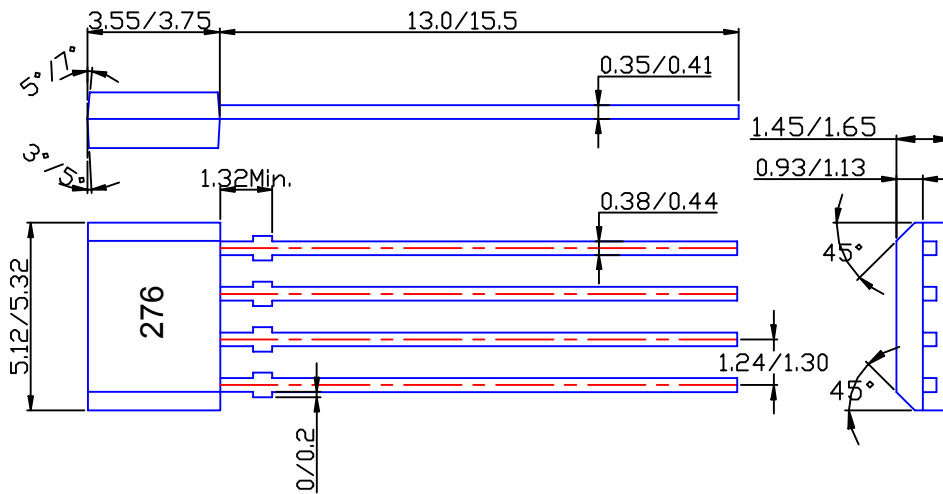
Active Area Depth



Package Sensor Location



Package Information (unit: mm)



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