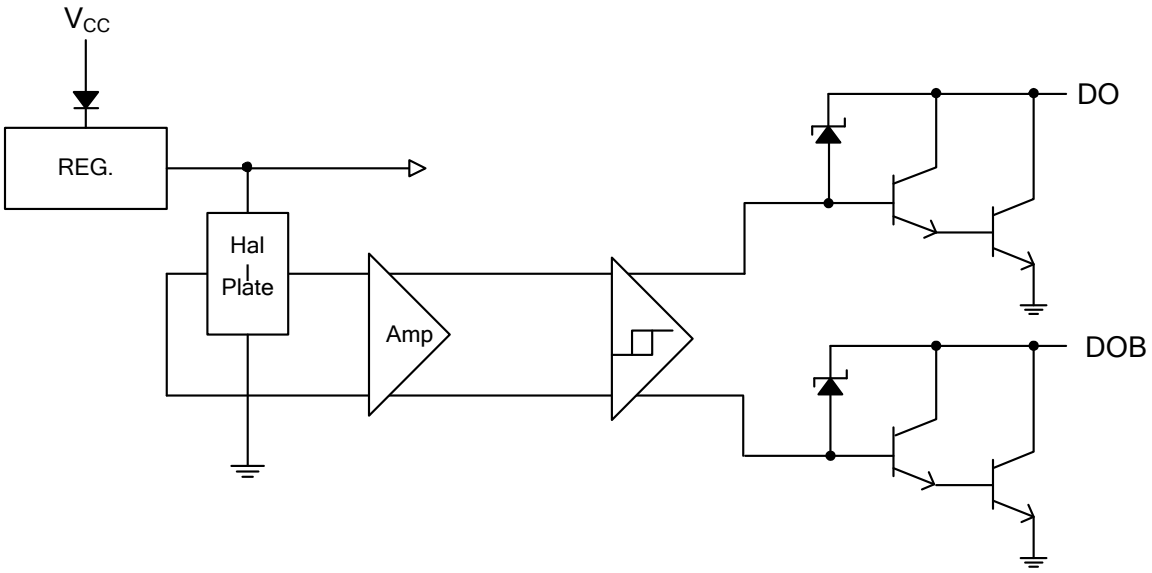
Pin Descriptions

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

Functional Block Diagram



Absolute Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Symbol	Parameter	Rating	Unit
V_{CC}	Supply Voltage	28	V
$V_{out\ (off)}$	Output “OFF ” Voltage	28	V
$I_{O\ (con)}$	Output “ON” Current	400 (Note 5)	mA
$I_{O\ (hold)}$		500	mA
$I_{O\ (peak)}$		700	mA
B	Magnetic Flux Density	Unlimited	Gauss
T_{ST}	Storage Temperature Range	-65 to +150	°C
P_D	Power Dissipation (Note 6)	550	mW
θ_{JA}	Thermal Resistance Junction-to-Ambient (SIP-4)	227	°C/W
θ_{JC}	Thermal Resistance Junction-to-Case (SIP-4)	49	°C/W

Recommended Operating Conditions (@T_A = +25°C, unless otherwise specified.)

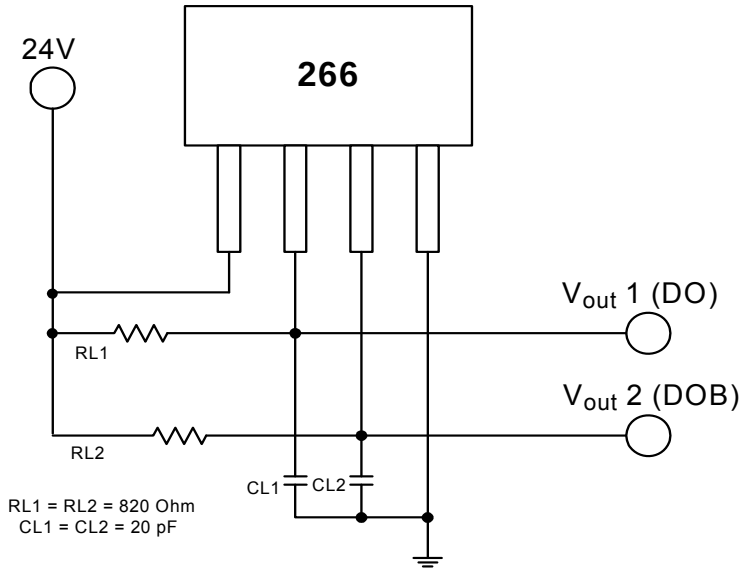
Symbol	Characteristic	Conditions	Min	Max	Unit
V_{CC}	Supply Voltage	Operating	4	28	V
T_A	Operating Ambient Temperature (Note 7)	Operating	-20	85	°C

Notes: 4. This application circuit can't protect reverse coil current if power is connecting reverse.
5. $I_{o\ (con)}$ is 150 mA at +85°C.
6. See Performance Characteristics for other conditions.
7. Shall not exceed P_D and Safety Operation Area.

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Symbol	Characteristic	Conditions	Min	Typ.	Max	Unit
V_z	Output Zener Breakdown	Output Turn off	54	62	70	V
$V_{CE\ (SAT)}$	Output Saturation Voltage	V_{CC} = 24V, I_C = 400mA	—	1.1	1.5	V
I_{CEX}	Output Leakage Current	V_{CE} = 24V, V_{CC} = 24V	—	< 0.1	10	μA
I_{CC}	Supply Current	V_{CC} = 24V, Output Open	—	5	10	mA
tr	Output Rise Time	V_{CC} = 24V, RL = 820Ω, CL = 20pF	—	1.0	5	μs
tf	Output Falling Time	V_{CC} = 24V, RL = 820Ω, CL = 20pF	—	1.0	1.5	μs
Δt	Switch Time Differential	V_{CC} = 24V, RL = 820Ω, CL = 20pF	—	3.0	10	μs

Test Circuit



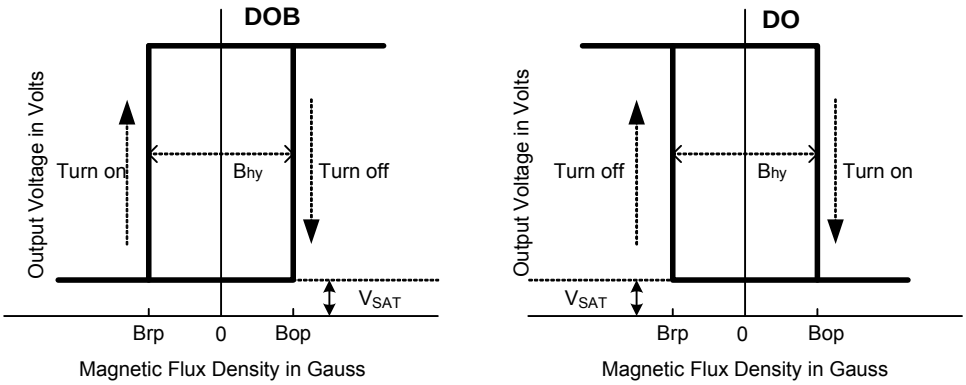
Magnetic Characteristics

A grade (1mT = 10 Gauss)

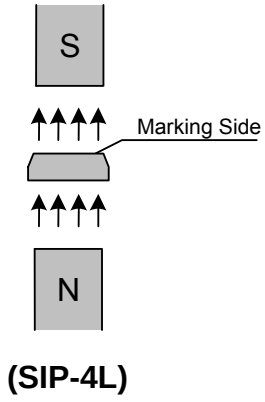
Symbol	Characteristic	Min	Typ.	Max	Unit
Bop	Operation Point	10	—	70	Gauss
Brp	Release Point	-70	—	-10	Gauss
Bhy	Hysteresis	—	80	—	Gauss

B grade

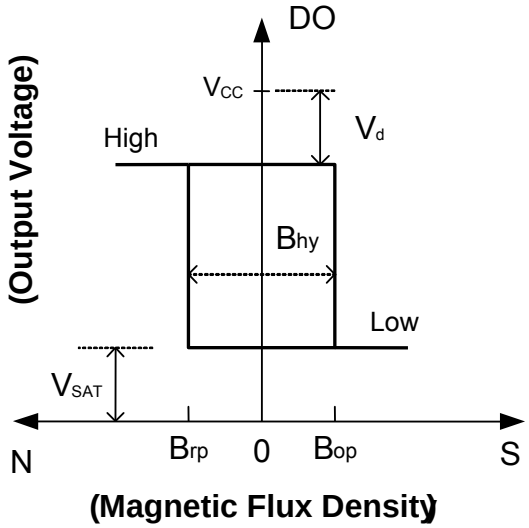
Symbol	Characteristic	Min	Typ.	Max	Unit
Bop	Operation Point	—	—	100	Gauss
Brp	Release Point	-100	—	—	Gauss
Bhy	Hysteresis	—	80	—	Gauss



Operation Characteristics



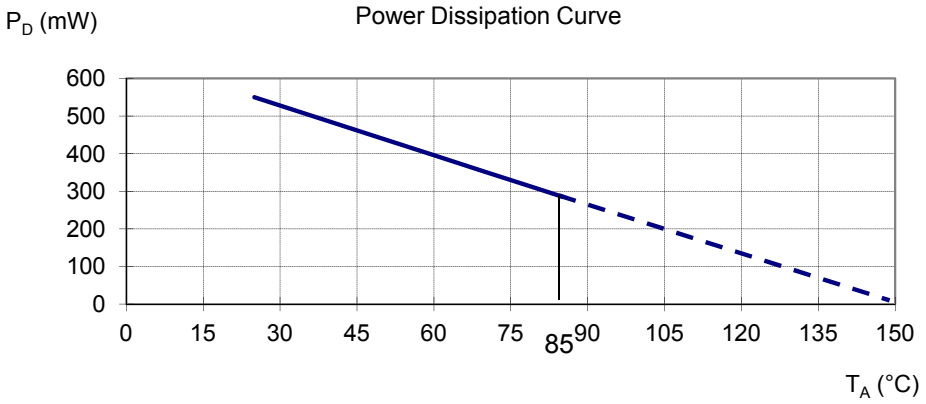
(SIP-4L)



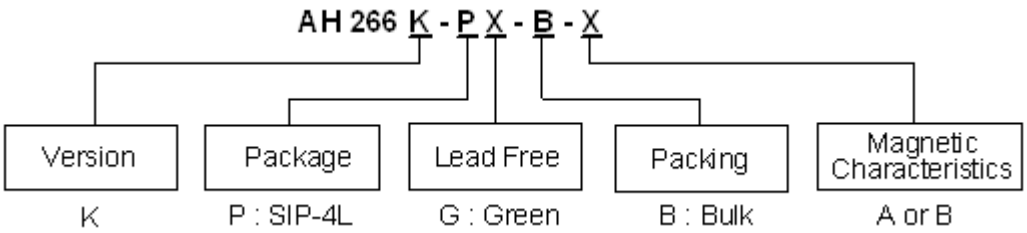
(Magnetic Flux Density)

Performance Characteristics

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



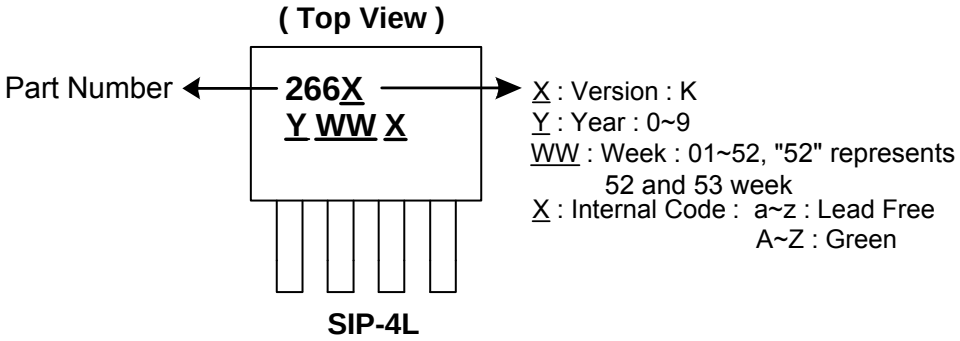
Ordering Information



Device	Package Code	Packaging (Note 8)	Bulk		Magnetic Characteristics
			Quantity	Part Number Suffix	
AH266K-PG-B-A	P	SIP-4	1000	-B	A
AH266K-PG-B-B	P	SIP-4	1000	-B	B

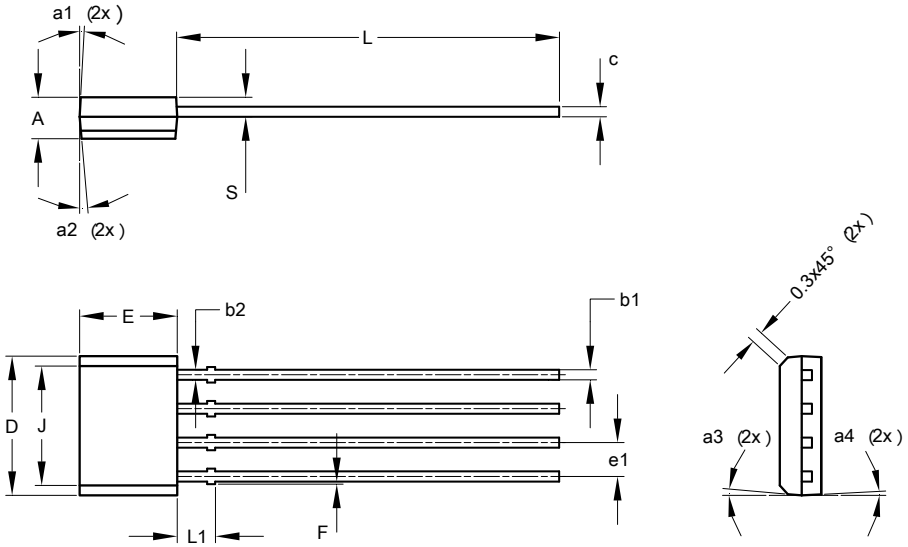
Note: 8. For packaging details, go to our website at http://www.diodes.com/products/packages.html

Marking Information



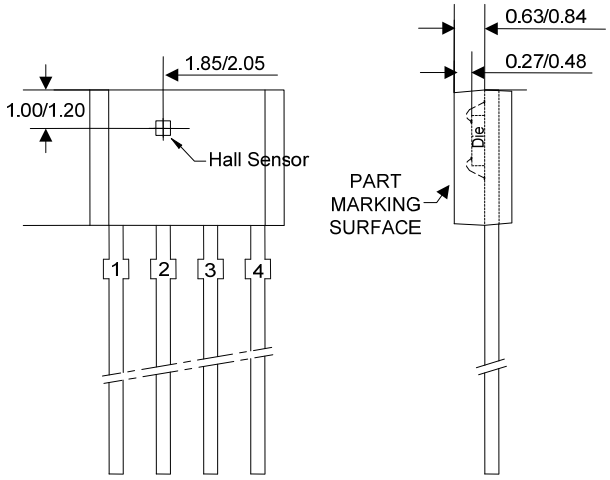
Package Outline Dimensions (All dimensions in mm.)

(1) Package type: SIP-4L



SIP-4			
Dim	**Min**	**Max**	**Typ**
A	1.45	1.65	1.55
b1	0.38	0.44	0.40
b2	-	-	0.48
c	0.35	0.45	0.40
D	5.12	5.32	5.22
e1	1.24	1.30	1.27
E	3.55	3.75	3.65
F	0.00	0.20	-
J	4.10	4.30	4.20
L	14.00	14.60	14.30
L1	1.32	1.52	1.42
S	0.63	0.83	0.73
a1	-	5°	3°
a2	4°	7°	5°
a3	4°	7°	5°
a4	-	5°	3°
All Dimensions in mm			

Min/Max (in mm)



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